

EXHIBIT B

**THIS EXHIBIT CONTAINS CONFIDENTIAL OR
RESTRICTED CONFIDENTIAL INFORMATION
AND HAS BEEN SERVED VIA EMAIL.**

1 IN THE UNITED STATES DISTRICT COURT
2 FOR THE DISTRICT OF NEW JERSEY
3 CAMDEN VICINAGE
4 -----)
5 IN RE: VALSARTAN, LOSARTAN,) MDL No. 2875
6 AND IRBESARTAN PRODUCTS)
7 LIABILITY LITIGATION) Civil No. 19-2875
8) (RBK/JS)
9 -----)
10 THIS DOCUMENT RELATES TO ALL)
11 CASES) HON. ROBERT B. KUGLER
12)
13 -----)
14 - CONFIDENTIAL INFORMATION -
15 SUBJECT TO PROTECTIVE ORDER

11 VIDEOTAPED DEPOSITION OF
JOHN M. FLACK, MD, MPH, FAHA, MACP, FASH
12 September 28, 2021

14 Remote videotaped deposition of JOHN M.
15 FLACK, MD, MPH, FAHA, MACP, FASH, commencing at 9:09
16 a.m., on the 28th day of September, 2021, before
17 Juliana F. Zajicek, Registered Professional Reporter,
18 Certified Shorthand Reporter and Certified Realtime
19 Reporter.

21 - - -

23 GOLKOW LITIGATION SERVICES
877.370.3377 ph | 917.591.5672 fax
deps@golkow.com

Page 2

1 APPEARANCES:
 2 (ALL PARTIES APPEARED REMOTELY)
 3 ON BEHALF OF THE PLAINTIFFS:
 4 SLACK DAVIS SANGER LLP
 5 6001 Bold Ruler Way, Suite 100
 6 Austin, Texas 78746
 7 BY: JOHN R. DAVIS, ESQ.
 8 jdavis@slackdavis.com
 9 -and-
 10 KANNER & WHITELEY, LLC
 11 701 Camp Street
 12 New Orleans, Louisiana 70130
 13 504-524-5777
 14 BY: LAYNE HILTON, ESQ.
 15 lhilton@kanner-law.com;
 16 DAVID J. STANOCH, ESQ.
 17 d.stanoch@kanner-law.com
 18 -and-
 19 HOLLIS LAW FIRM
 20 8101 College Boulevard, Suite 260
 21 Overland Park, Kansas 66210
 22 800-701-3672
 23 BY: IRIS SIMPSON, ESQ.
 24 iris@hollislawfirm.com;
 C. BRETT VAUGHN, ESQ.
 brett@hollislawfirm.com
 -and-
 MAZIE SLATER KATZ & FREEMAN, LLC
 103 Eisenhower Parkway
 Roseland, New Jersey 07068
 973-228-9898
 BY: ADAM SLATER, ESQ.
 aslater@mazieslater.com
 -and-

Page 3

1 APPEARANCES:
 2 (ALL PARTIES APPEARED REMOTELY)
 3 ON BEHALF OF THE PLAINTIFFS: (Continued)
 4 FARR LAW FIRM, P.A.
 5 99 Nesbit Street
 6 Punta Gorda, Florida 33950
 7 941-639-1158
 8 BY: GEORGE T. WILLIAMSON, ESQ.
 9 gwilliamson@farr.com
 10 -and-
 11 HONIK LLC
 12 1515 Market Street, Suite 1100
 13 Philadelphia, Pennsylvania 19102
 14 267-535-1300
 15 BY: RUBEN HONIK, ESQ.
 16 ruben@honiklaw.com
 17 ON BEHALF OF DEFENDANT ALBERTSON'S LLC:
 18 BUCHANAN INGERSOLL & ROONEY PC
 19 1700 K Street, N.W., Suite 300
 20 Washington, D.C. 20006-3807
 21 202-452-7318
 22 BY: ASHLEY D. JONES, ESQ.
 23 ashley.jones@bipc.com
 24 -and-
 BUCHANAN INGERSOLL & ROONEY PC
 227 West Trade Street, Suite 600
 Charlotte, North Carolina 28202
 704-444-3475
 BY: CHRISTOPHER B. HENRY, ESQ.
 christopher.henry@bipc.com

Page 4

1 APPEARANCES:
 2 (ALL PARTIES APPEARED REMOTELY)
 3 ON BEHALF OF DEFENDANTS CVS PHARMACY, INC. and RITE
 4 AID CORPORATION:
 5 BARNES & THORNBURG LLP
 6 11 South Meridian Street
 7 Indianapolis, Indiana 46204-3535
 8 317-231-6491
 9 BY: KARA M. KAPKE, ESQ.
 10 kkapke@btlaw.com
 11 ON BEHALF OF DEFENDANTS TEVA PHARMACEUTICAL
 12 INDUSTRIES, LTD., TEVA PHARMACEUTICALS SA, INC.,
 13 ACTAVIS LLC, and ACTAVIS PHARMA, INC.:
 14 GREENBERG TRAURIG, LLP
 15 Terminus 200
 16 3333 Piedmont Road NE, Suite 2500
 17 Atlanta, Georgia 30305
 18 678-553-2100
 19 BY: STEVEN M. HARKINS, ESQ.
 20 harkins@gtlaw.com
 21 -and-
 22 GREENBERG TRAURIG, LLP
 23 2101 L Street, N.W., Suite 1000
 24 Washington, D.C. 20037
 202-530-8587
 BY: STEPHEN T. FOWLER, ESQ.
 fowlerst@gtlaw.com
 -and-
 WALSH PIZZI O'REILLY FALANGA, LLP
 Three Gateway Center
 100 Mulberry Street, 15th Floor
 Newark, New Jersey 07102
 973-757-1017
 BY: CHRISTINE I. GANNON, ESQ.
 cgannon@walsh.law

Page 5

1 APPEARANCES:
 2 (ALL PARTIES APPEARED REMOTELY)
 3 ON BEHALF OF DEFENDANTS ZHEJIANG HUAHAI PHARMACEUTICAL
 4 CO., LTD., PRINSTON PHARMACEUTICAL INC., HUAHAI U.S.,
 5 INC., AND SOLCO HEALTHCARE US, LLC:
 6 DUANE MORRIS, LLP
 7 100 High Street, Suite 2400
 8 Boston, Massachusetts 02110-1724
 9 857-488-4267
 10 BY: LAUREN A. APPEL, ESQ.
 11 laappel@duanemorris.com
 12 ON BEHALF OF DEFENDANTS AUROBINDO PHARMA LTD.,
 13 AUROLIFE PHARMA LLC, and AUROBINDO PHARMA USA, INC.:
 14 CIPRIANI & WERNER, P.C.
 15 450 Sentry Parkway
 16 Blue Bell, Pennsylvania 19422
 17 610-567-0700
 18 BY: JESSICA M. HEINZ, ESQ.
 19 jheinz@c-wlaw.com
 20 ON BEHALF OF DEFENDANT MYLAN PHARMACEUTICALS, INC.:
 21 PIETRAGALLO GORDON ALFANO BOSICK &
 22 RASPANTI, LLP
 23 One Oxford Centre
 24 Pittsburgh, Pennsylvania 15219
 412-263-1840
 BY: JASON M. REEFER, ESQ.
 jmr@pietragallo.com
 ON BEHALF OF DEFENDANT SCIEGEN PHARMACEUTICALS, INC.:
 HINSHAW & CULBERTSON LLP
 53 State Street, 27th Floor
 Boston, Massachusetts 02109
 617-213-7045
 BY: GEOFFREY M. COAN, ESQ.
 gcoan@hinshawlaw.com

Page 6	
1	ALSO PRESENT:
2	MR. BRAD MATTA.
3	
4	VIDEOGRAPHER:
5	CAROLIN DE LA ROSA
6	Golkow Litigation Services
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	

Page 8	
1	E X H I B I T S (Continued)
2	PLAINTIFF-FLACK EXHIBIT MARKED FOR ID
3	No. 5 Department of Justice, U.S. 84
4	Attorney's Office, Southern
5	District of New York Press Release
6	dated Wednesday, July 1, 2020,
7	titled: "Acting Manhattan U.S.
8	Attorney Announces \$678 Million
9	Settlement of Fraud Lawsuit
10	Against Novartis Pharmaceuticals
11	For Operating Sham Speaker
12	Programs Through Which It Paid
13	Over \$100 Million to Doctors To
14	Unlawfully Induce Them To
15	Prescribe Novartis Drugs"
16	No. 6 E-mail dated 4/12/06 from Roger 90
17	Stojeba to Melissa Ostendorf,
18	Subject: Re: National speakers up
19	for grabs!; NPCLSV_LIT002333074
20	No. 7 E-mail chain dated 3/29/06 from 96
21	Jason Barnes to Jill Gross, among
22	others; NPCLSV_LIT003753068 - 070
23	No. 8 Journal of Human Hypertension, 101
24	Article titled "Efficacy and
	safety of initial combination
	therapy with amlodipine/valsartan
	compared with amlodipine
	monotherapy in black patients with
	stage 2 hypertension: The EX-STAND
	study," by Flack, et al.
	No. 9 Original Research, Therapeutic 117
	Advances in Cardiovascular
	Disease, titled "Individualizing
	hypertension treatment with
	impedance cardiography: A
	meta-analysis of published
	trials," by Ferrario, Flack, et
	al.
	No. 10 John M. Flack, M.D., MPH, List of 124
	Materials Considered

Page 7	
1	I N D E X
2	
3	WITNESS: PAGE:
4	JOHN M. FLACK, MD, MPH, FAHA, MACP, FASH
5	
6	EXAM BY MR. DAVIS..... 10
7	EXAM BY MR. FOWLER..... 187
8	FURTHER EXAM BY MR. DAVIS..... 209
9	
10	*****
11	
12	E X H I B I T S
13	PLAINTIFF-FLACK EXHIBIT MARKED FOR ID
14	No. 1 Defendants' Responses and 13
15	Objections to Plaintiffs' Amended
16	Notice of Videotaped Deposition of
17	John M. Flack, MD, MPH, FAHA,
18	MACP, FASH
19	No. 2 Invoice, Date of Service: Through 22
20	July 20, 2021, Invoice Date: July
21	21, 2021
22	No. 3 Expert Report of John Flack, M.D., 49
23	M.P.H.
24	No. 4 Curriculum Vitae - John M. Flack, 60
	MD, MPH, FAHA, MACP, FASH

Page 9	
1	E X H I B I T S (Continued)
2	PLAINTIFF-FLACK EXHIBIT MARKED FOR ID
3	No. 11 Scientific Reports, Article titled 157
4	"Association between blood
5	pressure and risk of cancer
6	development: A systematic review
7	and meta-analysis of observational
8	studies," by Seretis, et al.
9	No. 12 Supplemental list of materials 192
10	considered
11	No. 13 Flash drive containing reliance 193
12	material
13	No. 14 Article published in the 202
14	Pharmacology & Therapeutics
15	Journal: "Carcinogenesis: Failure
16	of resolution of inflammation?" By
17	Anna Fishbein, et al.
18	No. 15 Invoice, Date of Service: Through 220
19	July 21 - September 7, 2021,
20	Invoice Date: September 7, 2021
21	
22	
23	
24	

Page 10

1 THE VIDEOGRAPHER: We are now on the record. My
 2 name is Carolin De La Rosa, a videographer for Golkow
 3 Litigation Services. Today's date is September 28th,
 4 2021, and the time is 9:09 a.m.
 5 This deposition is being held In the
 6 Matter of Valsartan, Losartan, and Irbesartan Products
 7 Liability Litigation.
 8 The deponent today is Dr. John Flack.
 9 All parties are noted on the stenographic
 10 record.
 11 Will the court reporter please swear in
 12 the witness.
 13 (WHEREUPON, the witness was duly
 14 sworn.)
 15 JOHN M. FLACK,
 16 MD, MPH, FAHA, MACP, FASH,
 17 called as a witness herein, having been first duly
 18 sworn, was examined and testified as follows:
 19 EXAMINATION
 20 BY MR. DAVIS:
 21 Q. Good morning, Dr. Flack. My name is John
 22 Davis. I will be taking your deposition today. Let's
 23 just start with a couple of simple items.
 24 Can you give your current work and home

Page 11

1 addresses for me?
 2 A. My current work address is 7 Illinois
 3 University, 701 North First Street in Springfield,
 4 Illinois. My home address is 4420 Foxhall Lane in
 5 Springfield, Illinois 62711.
 6 Q. Great. Thank you.
 7 Have you ever given testimony under oath
 8 before, Dr. Flack?
 9 A. Yes. Yes, I have.
 10 Q. About how many times?
 11 A. Four to five.
 12 Q. Okay. What context would those occasions
 13 have occurred in?
 14 A. Expert witness, being an expert witness in
 15 cases.
 16 Q. Okay. For -- for all four or five of
 17 those instances, that would have been testifying as an
 18 expert witness similar to what you are doing today?
 19 A. Testifying as an expert witness in a case,
 20 a specific case of medical care.
 21 Q. Like a medical malpractice case?
 22 A. Correct.
 23 Q. Sorry. I didn't catch your answer there,
 24 is that a yes?

Page 12

1 A. Yes. Yes, medical malpractice.
 2 Q. And that was -- all of those four to five
 3 instances would have been in that context?
 4 A. All four to five instances would have been
 5 medical malpractice.
 6 Q. Okay. Have you ever been involved as a
 7 party in any litigation before?
 8 A. (Indicating.)
 9 Q. Is that a no?
 10 A. No.
 11 Q. Okay. Just -- just for the record, so
 12 that the transcript is clear and the record is clear,
 13 it -- I just ask that -- that you provide a verbal
 14 answer of -- of yes or no. "Um-hums" or -- or just
 15 kind of shaking your head, that -- that's going to be
 16 hard for the court reporter to take down.
 17 So the answer was no, that you have not
 18 been involved as a party in any litigation before?
 19 A. No.
 20 Q. Okay. Have you ever been served a
 21 subpoena or been a witness in any litigation?
 22 A. No, I haven't.
 23 Q. Okay. Let's start with -- I'm going to
 24 mark an exhibit, which is the responses to the notice

Page 13

1 of this deposition.
 2 MR. DAVIS: For the record, I'm going to mark
 3 these as PL-Flack as the beginning modifier. So this
 4 will be Plaintiff-Flack 1.
 5 And then I will share my screen. Unless,
 6 Steve, do you have a copy of the responses to the
 7 notice? I can share my screen otherwise.
 8 MR. FOWLER: Yeah, I believe we do. Bear --
 9 bear with me.
 10 MR. DAVIS: Okay.
 11 MR. FOWLER: You know what, I'm --
 12 MR. DAVIS: That's fine, I'll just share my
 13 screen.
 14 (WHEREUPON, a certain document was
 15 marked Plaintiff-Flack Deposition
 16 Exhibit No. 1, for identification, as
 17 of 09/28/2021.)
 18 BY MR. DAVIS:
 19 Q. Dr. Flack, are you able to see the -- the
 20 document I've shared?
 21 A. I can see it.
 22 Q. Okay. Did you personally review the
 23 notice that we served on you when it was served?
 24 A. I've seen it, correct.

Page 14

1 Q. Okay. Did you assist in the collection of
2 any documents that were produced to us responsive to
3 this notice?
4 A. I did.
5 Q. Can you describe to me, I guess, just at a
6 high -- we'll start at a high level, what type of
7 searches you did for responsive documents?
8 A. Well, documents were some sent to me, some
9 I pulled off of expert witness reports, and others
10 came off of either reviewing the bibliography in
11 articles that were pulled, as well as searching for
12 valsartan NDMA on PubMed.
13 Q. Okay. So let's -- that was a couple of
14 items there. I just want to make sure I got each one
15 down.
16 So you said that some were sent to you.
17 Would that be by counsel?
18 A. That would be by counsel.
19 Q. Okay. Specifically who -- who of defense
20 counsel sent those to you?
21 A. Offhand I don't remember.
22 Q. Okay. And then you said that some you
23 pulled off of other expert witness reports?
24 A. Yes, I did.

Page 15

1 Q. Would that be plaintiff expert witness
2 reports or defendant expert witness reports or both?
3 A. On the plaintiff and defendant.
4 Q. Okay. And then you said you reviewed the
5 bibliographies to some of the articles that you read
6 and tracked down information that way?
7 A. That is correct.
8 Q. Okay. And what were the final, I think
9 you had one or two final things?
10 A. I searched valsartan and NDMA on the
11 PubMed site.
12 Q. Okay. So when you say you searched
13 valsartan and NDMA, are you referring to those as
14 keywords?
15 A. Yes.
16 Q. Okay. So how was that -- how were those
17 keywords constructed? Was that, like, valsartan -- it
18 had to be valsartan and NDMA or did you search
19 valsartan and then you searched NDMA?
20 A. When I do searches and I give you terms
21 like that, I use them both simultaneously.
22 Q. Gotcha. So any -- any hits in that PubMed
23 database would have been hits for both valsartan and
24 NDMA?

Page 16

1 A. That's correct.
2 Q. Okay. Any -- anything else that you did?
3 A. No.
4 Q. Okay. So I understand you to be talking
5 about documents that you searched for in preparing
6 your report, and we'll come back to that in a second.
7 My -- my more specific question for right now, though,
8 was we had served as part of this notice that I'm
9 scrolling through certain document requests. You'll
10 see I've highlighted. There is about 11 of them. And
11 so some of the -- let's start with the ones that --
12 that you appeared to -- to be refusing to produce
13 documents for.
14 Was that your decision or did you come to
15 that decision after discussions with counsel?
16 MR. FOWLER: Objection; form to the colloquy.
17 Objection; form of the question.
18 BY THE WITNESS:
19 A. What documents are you talking about that
20 I refused to provide?
21 BY MR. DAVIS:
22 Q. Sure. I'll just -- I'll pull up an
23 example of one of these.
24 So, for example -- so, for example, do you

Page 17

1 see No. 6?
2 A. Yes, I see it.
3 Q. Okay. Do you understand that this is the
4 response that you've provided to that request that
5 I've highlighted?
6 MR. FOWLER: Objection; form.
7 BY THE WITNESS:
8 A. I see it.
9 BY MR. DAVIS:
10 Q. Okay. Did you assist in preparing that
11 response?
12 MR. FOWLER: Objection; form.
13 BY MR. DAVIS:
14 Q. You can answer the question, Dr. Flack.
15 A. Any -- any document that concerns me I --
16 I've had input on, and so, yes, I did.
17 Q. Okay. And so do you understand that the
18 response, for example, to No. 6 here is a refusal to
19 provide responsive documents?
20 MR. FOWLER: Objection; form.
21 BY THE WITNESS:
22 A. Actually, no, I -- I don't because
23 there -- there are no documents to produce.
24 BY MR. DAVIS:

Page 18

1 Q. So let's -- let's talk about what you did
2 to search for documents then that were responsive to
3 certain of these requests, and let me go through.
4 We'll start at the beginning then and just go through
5 each -- each of them.
6 So No. 1, do you understand that to be
7 asking for all of your invoices?
8 A. Yes, I do.
9 Q. Okay. And you have -- you have produced
10 one invoice in this as -- as a responsive document to
11 that request, correct?
12 A. No, that's incorrect. I've submitted two
13 invoices thus far.
14 Q. You've submitted two invoices to counsel?
15 A. Correct.
16 Q. Okay. Any reason why we would have only
17 been produced one?
18 A. Actually, it was later.
19 MR. DAVIS: Steve or Stephen, can I make a
20 request that that be sent to me as soon as possible so
21 that I can review it on a break?
22 MR. FOWLER: Sure, we'll run that down. I -- I
23 don't know that it wasn't provided, but we'll run down
24 the second invoice.

Page 19

1 MR. DAVIS: Sure. I -- I can tell you I've only
2 got one invoice. The -- the folder that was produced
3 contained one document.
4 BY MR. DAVIS:
5 Q. Okay. Okay. So you've submitted two
6 invoices to counsel.
7 Is that your testimony?
8 A. That is correct.
9 Q. What about backup documents that you kept
10 to keep track of your time that went into those
11 invoices, do you keep written records of your -- the
12 time that you've spent and what you've done?
13 MR. FOWLER: Objection; form, foundation.
14 BY THE WITNESS:
15 A. My reported time on my invoices is
16 accurate.
17 BY MR. DAVIS:
18 Q. Okay. Well, my question wasn't whether
19 the time was accurate. My -- my question was whether
20 you kept written records that logged your time
21 contemporaneously to actually spending that time.
22 Do you understand the question?
23 A. Yeah, I understand the question. There
24 are no written real records of that.

Page 20

1 Q. There -- there are no written records of
2 that?
3 A. Nothing beyond a sticky on my computer
4 screen.
5 Q. Did you keep those stickies on your
6 computer screen?
7 A. No.
8 Q. Okay. So, for example, in the one invoice
9 we have that appears to log 43 and a half hours up
10 through, I believe, July 20th, when were you retained
11 in this case?
12 A. I don't remember the exact date I was
13 retained. It was well -- it was before then, but I
14 don't remember the exact date.
15 Q. Okay. So when you prepared that July 20th
16 invoice that logged 43 and a half hours, how did you
17 arrive at that number without going back to consult
18 any notes or anything like that?
19 MR. FOWLER: Objection; form, foundation.
20 BY THE WITNESS:
21 A. I think I've already answered that
22 question.
23 BY MR. DAVIS:
24 Q. And what was your answer to that question?

Page 21

1 A. I'm not going to repeat it.
2 Q. Sir, I'm -- you -- you have to repeat the
3 question -- or you have to repeat your answer. I'm
4 sorry. You have to play by the rules.
5 A. I've already answered -- I've already
6 answered the question. I said it's beyond my memory
7 the only thing that I've ever used is stickies on my
8 computer screen.
9 Q. Okay. And so my question, which, you
10 know, you still haven't -- and this is not a repeated
11 question, so I'm expecting a new answer here, is when
12 you wrote down 43 and a half hours as of July 20th,
13 how did you come up or tabulate those 43 and a half
14 hours?
15 MR. FOWLER: Objection; form. Asked and
16 answered, Counsel.
17 BY THE WITNESS:
18 A. I don't think there is any magic about how
19 you -- you tabulate it. You remember the time you
20 spent talking with counsel, you remember the time that
21 you spent on -- on documents. It wasn't extensive.
22 And there was no need for an extensive set of
23 documentation. And, actually, I believe 43 and a half
24 hours is -- I don't know. Is -- are you sure that

<p>Page 22</p> <p>1 that only includes through -- through July and not 2 beyond that? 3 BY MR. DAVIS: 4 Q. Well, why don't we go ahead and mark that 5 as an exhibit. I'm marking Plaintiff-Flack 2, which 6 I'll open. 7 (WHEREUPON, a certain document was 8 marked Plaintiff-Flack Deposition 9 Exhibit No. 2, for identification, as 10 of 09/28/2021.) 11 BY MR. DAVIS: 12 Q. Can you see that, Dr. Flack? 13 A. Yes. 14 Q. Do you recognize this as an invoice that 15 includes a date of service through July 20, 2021? 16 A. I do. 17 Q. Okay. And can you give me an estimate of 18 when you started working on this case? 19 A. I ended up starting working on this case 20 sometime over the summer, because I had other -- other 21 projects, so sometime probably after June 1st. 22 Q. But in the month of June? 23 A. In the month of June, July. Uh-huh. 24 Q. Okay. Well, is it June or July?</p>	<p>Page 24</p> <p>1 MR. FOWLER: Asked and answered. 2 BY THE WITNESS: 3 A. Again, I will repeat my answer to that. I 4 do not have the stickies. 5 BY MR. DAVIS: 6 Q. Okay. And so your -- your testimony is 7 that you went back through in your head about a month 8 and a half worth of work comprising 43 and a half 9 hours and accurately came up with that number? 10 MR. FOWLER: Objection; form, mischaracterizing. 11 BY THE WITNESS: 12 A. Actually, that's not my testimony, and you 13 know it's not my testimony. My testimony is that I 14 had it in my head and I used computer stickies. I 15 didn't say I did either one solely. 16 BY MR. DAVIS: 17 Q. Okay. The second invoice that we don't 18 have, what's the -- what's the date of service on that 19 one? 20 A. I don't remember. It was submitted a 21 couple of weeks ago and covered the interim period but 22 it was through the first part of September. 23 Q. How many hours was that invoice for? 24 A. My memory, let's see, around 12 hours</p>
<p>Page 23</p> <p>1 MR. FOWLER: Objection; form. 2 BY THE WITNESS: 3 A. I said I worked during the months of June 4 and July. 5 BY MR. DAVIS: 6 Q. Understood. 7 So this July 20th invoice that is through 8 July 20th but dated July 21st would have encompassed 9 about a month and a half or a month and three weeks of 10 work roughly? 11 A. Approximately, yes. 12 Q. Okay. And so my -- my question is when 13 you wrote down 43 and a half hours, did you -- were 14 you going back to consult any written documents in 15 your possession to actually arrive at that number? 16 MR. FOWLER: Objection; form, asked and 17 answered. 18 BY THE WITNESS: 19 A. I really answered that question now twice. 20 I told you that I had it in my head and I used 21 stickies on my computer screen. 22 BY MR. DAVIS: 23 Q. Okay. And do you still have those 24 stickies?</p>	<p>Page 25</p> <p>1 approximately. 2 Q. Okay. We'll -- we'll come back to that 3 invoice. Let's keep going through Exhibit 1. 4 MR. FOWLER: Counsel, we -- I have a hard copy 5 of that now which I can put before the witness if that 6 will -- if that will help you? 7 MR. DAVIS: Sure, that would be great. 8 BY MR. DAVIS: 9 Q. Okay. In -- in light of that, Dr. Flack, 10 do you have that document in front of you, which is 11 Exhibit 1? 12 A. I do. 13 Q. Okay. I'm going to stop sharing my screen 14 then. 15 Okay. No. 2, do you have that in front of 16 you, on Page 3? 17 A. I do. 18 Q. Okay. And that request is: "Copies of 19 any notes, i.e., written or electronic, reflecting 20 consulting or litigation work that has not been 21 documented in invoices." 22 A. Yes. 23 Q. Okay. And you -- your counsel produced 24 marked up copies of -- of two articles to us</p>

<p style="text-align: right;">Page 26</p> <p>1 yesterday.</p> <p>2 Are you familiar with what I'm talking</p> <p>3 about?</p> <p>4 A. I'm familiar because I provided them to</p> <p>5 counsel.</p> <p>6 Q. Okay. Those were the Pottgard and -- and</p> <p>7 Gomm articles?</p> <p>8 A. Correct.</p> <p>9 Q. You have -- it appears that you have some</p> <p>10 highlights and -- and written -- handwritten notes on</p> <p>11 those articles.</p> <p>12 Is -- is that typically how you read? Are</p> <p>13 you, I guess, an analog person, do you like to read</p> <p>14 things printed out or do you like to read them</p> <p>15 electronically?</p> <p>16 A. Actually, I'm a -- a pretty diverse</p> <p>17 learner. I basically assimilate information in many</p> <p>18 ways and I'm not wedded to any one in particular.</p> <p>19 I've got a pretty good memory. Sometimes I highlight</p> <p>20 things, but it just depends. If I'm reading from a</p> <p>21 computer screen, I don't worry about it.</p> <p>22 Q. Were -- were those the only articles that</p> <p>23 you printed out and marked up in that fashion?</p> <p>24 A. Yes. That's why you received them.</p>	<p style="text-align: right;">Page 28</p> <p>1 Q. Okay. And you can't remember in which</p> <p>2 context you printed them, whether it was off the</p> <p>3 e-mail from counsel or directly off the search on</p> <p>4 PubMed?</p> <p>5 A. I'm not sure why you'd expect me to</p> <p>6 remember something like that.</p> <p>7 Q. Well, you remember 43 and a half hours</p> <p>8 pretty specifically, I thought you might remember</p> <p>9 this.</p> <p>10 A. No, you're -- again, you're</p> <p>11 mischaracterizing what I said. I said I used memory</p> <p>12 and I used stickies on the computer screen. Okay. I</p> <p>13 remember things that are relevant. Okay. And if you</p> <p>14 can explain to me why this is relevant, perhaps I'll</p> <p>15 feel bad about it, but --</p> <p>16 Q. Well, resp- -- respectfully, Dr. Flack, I</p> <p>17 don't have to explain the relevance of my questions,</p> <p>18 and if I ask irrelevant questions that should be</p> <p>19 perfectly fine with -- with your counsel since I'm</p> <p>20 wasting my time, but I -- I'm entitled to an answer to</p> <p>21 my question irrespective of your view of its</p> <p>22 relevance.</p> <p>23 MR. FOWLER: Objection to form.</p> <p>24 BY THE WITNESS:</p>
<p style="text-align: right;">Page 27</p> <p>1 Q. Okay. Is that because those were the --</p> <p>2 and going back to what you told me before about the</p> <p>3 sort of five to six ways that you collected documents</p> <p>4 in this case, that last one was that you had searched</p> <p>5 valsartan and NDMA in PubMed, were those the results</p> <p>6 of that search?</p> <p>7 A. These articles have shown up in expert</p> <p>8 witness expert reports, they have shown up on</p> <p>9 searches, and they were provided by counsel. So you</p> <p>10 can take your pick as to which way I got them.</p> <p>11 Q. Okay. But you're -- the answer to my</p> <p>12 question is that, yes, those did come up in the</p> <p>13 valsartan and NDMA search that you ran?</p> <p>14 A. Yes, they did.</p> <p>15 Q. And is that how you printed them, off that</p> <p>16 search?</p> <p>17 A. I just printed them off a printer.</p> <p>18 Q. Well, what -- did you print them</p> <p>19 contemporaneously to doing that search?</p> <p>20 A. Well, again, I'll try to answer this</p> <p>21 question. These articles were sent to me by counsel,</p> <p>22 I actually took them off of expert testimony that was</p> <p>23 given or expert reports, and also PubMed. So they</p> <p>24 could have come in any one of those forms.</p>	<p style="text-align: right;">Page 29</p> <p>1 A. Listen, again, I've answered questions for</p> <p>2 you several times, and I -- if you want to waste my</p> <p>3 time and your time, I'm glad to do it.</p> <p>4 BY MR. DAVIS:</p> <p>5 Q. Sure.</p> <p>6 So why did you print these two articles</p> <p>7 and only these two articles?</p> <p>8 MR. FOWLER: Objection; form, foundation.</p> <p>9 BY THE WITNESS:</p> <p>10 A. There is no relevant reason to give you</p> <p>11 for that, so I'm not going to offer you one.</p> <p>12 BY MR. DAVIS:</p> <p>13 Q. Well, again, I'm entitled to a -- an</p> <p>14 answer regardless of your view of its relevance.</p> <p>15 So can you explain to me why you printed</p> <p>16 those two articles and only those two articles?</p> <p>17 MR. FOWLER: Objection; form, foundation.</p> <p>18 BY THE WITNESS:</p> <p>19 A. I gave -- I gave you an answer.</p> <p>20 MR. FOWLER: Again, let me get my objection into</p> <p>21 this.</p> <p>22 Lack of foundation, Counsel.</p> <p>23 BY MR. DAVIS:</p> <p>24 Q. Okay. Dr. Flack, can you answer the</p>

<p>Page 30</p> <p>1 question why you printed only those two articles?</p> <p>2 MR. FOWLER: Objection; form, mischaracterizing,</p> <p>3 lack of foundation.</p> <p>4 BY THE WITNESS:</p> <p>5 A. I've already given you my answer. There</p> <p>6 is no particular reason.</p> <p>7 BY MR. DAVIS:</p> <p>8 Q. Okay. Thank you.</p> <p>9 And there is nothing other -- no other</p> <p>10 documents that you found as part of your searches to</p> <p>11 these document requests that were responsive to Item</p> <p>12 No. 2?</p> <p>13 A. I've given all -- anything that I found to</p> <p>14 counsel and counsel has forwarded those to you.</p> <p>15 Q. Okay. And how did you -- in -- in</p> <p>16 searching for responsive documents to these requests,</p> <p>17 what did you do? Did you go -- did you have I file on</p> <p>18 this case, like a physical file that you looked in, do</p> <p>19 you have a file on a hard drive somewhere? Can you</p> <p>20 describe to me what you did to search for responsive</p> <p>21 documents to these requests?</p> <p>22 A. Well, some of it is by memory. There --</p> <p>23 there are things that I was asked for that don't</p> <p>24 exist, and so that was fairly straightforward. The</p>	<p>Page 32</p> <p>1 physical file, which it appears you do since you have</p> <p>2 two marked up copies that were produced to me, did you</p> <p>3 search that physical file in its entirety for</p> <p>4 responsive documents to this notice?</p> <p>5 MR. FOWLER: Objection to the colloquy.</p> <p>6 Go ahead.</p> <p>7 BY THE WITNESS:</p> <p>8 A. You received what is in my physical file.</p> <p>9 BY MR. DAVIS:</p> <p>10 Q. So you -- the entirety of your physical</p> <p>11 file included those two articles?</p> <p>12 A. That is correct.</p> <p>13 Q. Okay. What about an electronic file, did</p> <p>14 you search that exhaustively?</p> <p>15 MR. FOWLER: Objection; form.</p> <p>16 BY THE WITNESS:</p> <p>17 A. The electronic data that I had was</p> <p>18 forwarded to you by counsel. So did I search it, no.</p> <p>19 It was just forwarded.</p> <p>20 BY MR. DAVIS:</p> <p>21 Q. Okay. But you -- so you are saying you</p> <p>22 did not search your electronic data?</p> <p>23 MR. FOWLER: Objection; form.</p> <p>24 BY THE WITNESS:</p>
<p>Page 31</p> <p>1 files that I had are basically communications that</p> <p>2 come to me from either downloading articles or -- or</p> <p>3 PDFs from the -- from counsel and all -- are articles</p> <p>4 that I pulled and those are referenced and have been</p> <p>5 provided to you.</p> <p>6 Q. Okay. And so it -- it sounds like you do</p> <p>7 have a file, whether it's physical or an electronic</p> <p>8 format somewhere on this case?</p> <p>9 MR. FOWLER: Objection; form.</p> <p>10 BY THE WITNESS:</p> <p>11 A. You have received what I have from my</p> <p>12 counsel -- from counsel.</p> <p>13 BY MR. DAVIS:</p> <p>14 Q. I understand that. I -- I'm not asking</p> <p>15 you to confirm that. Simply I'm asking whether you</p> <p>16 keep a physical or electronic file on this matter?</p> <p>17 A. You have been forwarded physical data and</p> <p>18 electronic data that I have.</p> <p>19 Q. Okay. Okay. And do you -- your testimony</p> <p>20 is that you searched the sources where that data came</p> <p>21 from fully, is that correct?</p> <p>22 A. I don't understand the question.</p> <p>23 Q. Sure.</p> <p>24 Did you -- did you -- if you have a</p>	<p>Page 33</p> <p>1 A. My understanding of your question is did</p> <p>2 you get all of the information electronic and hard</p> <p>3 copy and you did.</p> <p>4 BY MR. DAVIS:</p> <p>5 Q. How can you be sure of that if you did not</p> <p>6 search any electronic file on your computer?</p> <p>7 MR. FOWLER: Objection; form, argumentative.</p> <p>8 BY THE WITNESS:</p> <p>9 A. So, searching a file and then sending you</p> <p>10 part of it is not going to assure you got all of it.</p> <p>11 The only thing I did was forwarded what I had, and it</p> <p>12 was forwarded to you. So I don't -- there is no</p> <p>13 problem with you getting everything because I didn't</p> <p>14 search it.</p> <p>15 BY MR. DAVIS:</p> <p>16 Q. So your testimony is that you did search</p> <p>17 your electronic media for items that would be</p> <p>18 responsive to this notice?</p> <p>19 MR. FOWLER: Objection; form. This has been</p> <p>20 asked and answered I think we've -- three times now.</p> <p>21 BY THE WITNESS:</p> <p>22 A. What I did was I forwarded the items that</p> <p>23 were requested that I had electronically and I just</p> <p>24 sent them en masse.</p>

<p style="text-align: right;">Page 34</p> <p>1 BY MR. DAVIS:</p> <p>2 Q. Okay. But it sounds like there were items</p> <p>3 that were requested of you that you forwarded to</p> <p>4 counsel to be produced.</p> <p>5 My -- my question is whether there were</p> <p>6 items that were not requested that you may have found</p> <p>7 had you searched your computer.</p> <p>8 Do you -- do you understand the</p> <p>9 distinction there?</p> <p>10 A. I don't.</p> <p>11 MR. FOWLER: Objection to the form.</p> <p>12 BY THE WITNESS:</p> <p>13 A. There are no other relevant documents to</p> <p>14 this consultation that I'm doing that I have that you</p> <p>15 don't have.</p> <p>16 BY MR. DAVIS:</p> <p>17 Q. Okay. Let's look at No. 3: "Copies of</p> <p>18 any notes or other documentation, including</p> <p>19 PowerPoints, for any presentations, seminars or</p> <p>20 classes given by Dr. Flack with regard to the risks</p> <p>21 and benefits of" ARBs "or nitrosamines."</p> <p>22 Do you see that?</p> <p>23 A. I see that.</p> <p>24 Q. Okay. And it appears that we didn't</p>	<p style="text-align: right;">Page 36</p> <p>1 BY THE WITNESS:</p> <p>2 A. I'm not aware of any classes where they've</p> <p>3 been discussed.</p> <p>4 BY MR. DAVIS:</p> <p>5 Q. Okay. Moving to No. 4, that one reads:</p> <p>6 "Copies of any documents or articles relied upon for</p> <p>7 the opinions set forth in the report served, if not</p> <p>8 listed in the report."</p> <p>9 Do you see that?</p> <p>10 A. I see it.</p> <p>11 Q. Are there any such documents or articles</p> <p>12 that you relied upon that you don't list somewhere in</p> <p>13 your report?</p> <p>14 A. I have forwarded to you everything that</p> <p>15 I've relied upon.</p> <p>16 Q. Okay. So there is no category of</p> <p>17 documents out there that's -- that you've relied upon</p> <p>18 that's not listed somewhere in your report?</p> <p>19 MR. FOWLER: Objection; form.</p> <p>20 BY THE WITNESS:</p> <p>21 A. I've forwarded to you the documents that</p> <p>22 I've used in generating this report.</p> <p>23 BY MR. DAVIS:</p> <p>24 Q. I don't see the -- why you need to qualify</p>
<p style="text-align: right;">Page 35</p> <p>1 receive any documents responsive to this request.</p> <p>2 Is that a correct characterization?</p> <p>3 MR. FOWLER: Objection; form. Counsel, you do</p> <p>4 have the objections that -- that clearly state</p> <p>5 counsel's position that there are no responsive</p> <p>6 documents because it's beyond the scope of Rule 26.</p> <p>7 So you have our objection and -- and understanding why</p> <p>8 you have no such documents.</p> <p>9 BY MR. DAVIS:</p> <p>10 Q. Is that counsel's position, Dr. Flack, or</p> <p>11 is that a position that you agree with?</p> <p>12 MR. FOWLER: Objection; form.</p> <p>13 BY THE WITNESS:</p> <p>14 A. My counsel and I are in sync on this. So</p> <p>15 I have no problems with my counsel's position.</p> <p>16 BY MR. DAVIS:</p> <p>17 Q. Okay. Have you given any presentations,</p> <p>18 seminars or classes on nitrosamines?</p> <p>19 A. I have never given a specific class on</p> <p>20 nitrosamines, no.</p> <p>21 Q. Okay. Have you ever given any -- any</p> <p>22 class on anything where nitro -- you recall</p> <p>23 nitrosamines being a topic of -- of discussion?</p> <p>24 MR. FOWLER: Objection; form.</p>	<p style="text-align: right;">Page 37</p> <p>1 your answer like that. It's pretty simple question.</p> <p>2 My -- my question is: Are there any</p> <p>3 documents out there that -- that you've relied upon</p> <p>4 that are not somewhere in your report?</p> <p>5 MR. FOWLER: Objection to the colloquy.</p> <p>6 BY THE WITNESS:</p> <p>7 A. I am not qualifying it. I'm just telling</p> <p>8 you that I have forwarded all of the documents to you</p> <p>9 that I have used in my report. It is pretty</p> <p>10 straightforward.</p> <p>11 BY MR. DAVIS:</p> <p>12 Q. So the answer is -- is no then, there are</p> <p>13 no documents out there that you've relied upon that</p> <p>14 are not somewhere in your report?</p> <p>15 MR. FOWLER: Objection to the form and you have</p> <p>16 the objection to that request, Counsel.</p> <p>17 BY THE WITNESS:</p> <p>18 A. I've answered your question, and I'll</p> <p>19 repeat that I have forwarded all of documents to you</p> <p>20 through my counsel that have been used in the</p> <p>21 generation of my expert report.</p> <p>22 BY MR. DAVIS:</p> <p>23 Q. Okay. Do you take any issue with me</p> <p>24 interpreting that as no, there are no other documents</p>

<p style="text-align: right;">Page 38</p> <p>1 out there, because I'm happy to move on if that's what 2 you are trying to tell me? 3 A. I can't really speak for how you can 4 interpret it. My answer is really clear, and 5 certainly no other documents being out there is 6 compatible with my answer. 7 Q. Okay. Well, I'll take that as a no then 8 and we'll move on. 9 MR. FOWLER: Object to the colloquy. 10 BY MR. DAVIS: 11 Q. Is your answer the same with No. 5, which 12 is: "Copies of any documents or articles reviewed in 13 connection with the report served, whether or not 14 listed in the report or attachments thereto"? 15 MR. FOWLER: Same objection to the form. 16 BY THE WITNESS: 17 A. My answer to you is exactly the same. 18 BY MR. DAVIS: 19 Q. Thank you. 20 No. 6 requests: "Any illustrations, 21 PowerPoints, images, charts, tables, or demonstrative 22 exhibits that may be used by you in connection with a 23 Daubert hearing or trial testimony in this 24 litigation."</p>	<p style="text-align: right;">Page 40</p> <p>1 MR. DAVIS: Well, I'm not -- I'm -- I'm asking a 2 question that's related to No. 6, which is whether he 3 is aware of the existence of any illustrations, 4 PowerPoints, images, charts, tables or demonstrative 5 exhibits that relate in any way to your report or its 6 exhibits that are not included in the -- in the report 7 or exhibits. 8 BY MR. DAVIS: 9 Q. Do you follow the question, Dr. Flack? 10 MR. FOWLER: And I object. To be clear, don't 11 couch it as No. 6 if you are going past that. 12 MR. DAVIS: It's related to No. 6. You can stop 13 the -- I'm asking a question of Dr. Flack. 14 BY MR. DAVIS: 15 Q. Dr. Flack, let me start over just so it's 16 clear. 17 Are you aware of the existence, current 18 existence of any illustrations, PowerPoints, images, 19 charts, tables or demonstrative exhibits that relate 20 in any way to your report or its attachments that are 21 not included in the report or attachments that were 22 served on us? 23 A. I have no such documents. 24 Q. Okay. Thank you.</p>
<p style="text-align: right;">Page 39</p> <p>1 Do you see that? 2 A. Yes, I see it. 3 Q. Okay. And I understand that your counsel 4 has objected to responding to this request. 5 Is that your understanding as well? 6 A. That's what it says. 7 Q. That's a yes? 8 A. Yes. 9 Q. Are you aware of the existence of any 10 illustrations, PowerPoints, images, charts, tables or 11 demonstrative exhibits that have not been included in 12 your report or its attachments? 13 MR. FOWLER: Objection to form. 14 BY THE WITNESS: 15 A. There is nothing that's consistent with 16 this question that you haven't received. 17 BY MR. DAVIS: 18 Q. So the answer is, no, you are not aware of 19 the existence, current existence of any of those 20 categories of documents that do not appear in your 21 report or its exhibits? 22 MR. FOWLER: Objection; form. Counsel, if you 23 are speaking of No. 6, you have now gone past that, so 24 object to the form of the question.</p>	<p style="text-align: right;">Page 41</p> <p>1 No. 7 is documentations of -- or 2 documentation of any research grants that you've been 3 provided to study any ARBs, nitrosamines, or health 4 effects potentially related thereto. 5 Do you see that? 6 A. Yeah. 7 Q. Okay. And -- and we'll get to your CV in 8 a little bit where you do document research grants 9 related in some cases to ARBs. Let me focus on 10 nitrosamines. 11 Have you received any research grant to 12 study nitrosamines ever? 13 A. All research grants are listed in my CV. 14 I've never received a grant to study nitrosamines. 15 Q. Okay. Thank you. 16 Have you ever received a research grant to 17 study cancer? 18 A. I am not a cancer researcher and I've 19 never received a research grant to study cancer. 20 Q. No. 8 is a slightly different request, but 21 is your answer the same with regard to research that 22 you've performed? Have you performed any research 23 regarding nitrosamines, for example? 24 A. I have never done any of this with</p>

<p style="text-align: right;">Page 42</p> <p>1 nitrosamines, no.</p> <p>2 Q. Okay. And same answer with respect to</p> <p>3 cancer?</p> <p>4 A. That would be correct.</p> <p>5 Q. Are you aware of any -- well, let me start</p> <p>6 with -- so No. 9, it appears your counsel has objected</p> <p>7 to producing those documents.</p> <p>8 Is that your understanding?</p> <p>9 A. So when I -- when I read No. 9 it's hard</p> <p>10 to produce something that you are not aware that</p> <p>11 exists. I'm not aware that there has been any of</p> <p>12 these kinds of documents put forth in -- in my</p> <p>13 practice, certainly not in my department, and so there</p> <p>14 is really nothing there to produce.</p> <p>15 Q. Okay. Thank you. That answers my next</p> <p>16 question, so I can move on.</p> <p>17 No. 10 is: "Any documents or</p> <p>18 communications that" you have "received from any</p> <p>19 person or entity with regard to nitrosamine impurities</p> <p>20 in ARBs or any other drug."</p> <p>21 And it appears again your counsel, again,</p> <p>22 has objected to providing documents responsive to this</p> <p>23 request.</p> <p>24 Is that your understanding?</p>	<p style="text-align: right;">Page 44</p> <p>1 those communications exist they would be privileged?</p> <p>2 A. My -- if I have a -- a conversation about</p> <p>3 a health-related matter with a patient, I am not at</p> <p>4 liberty to discuss that with anybody else outside of</p> <p>5 my care team or other people who are involved in their</p> <p>6 care. I've had conversations here, but there is,</p> <p>7 again, nothing to document.</p> <p>8 Q. Okay. And then, finally, No. 12 is</p> <p>9 textbooks referenced by you in forming your opinions.</p> <p>10 Would any textbooks, references, or sites</p> <p>11 be -- have been included in your report or its</p> <p>12 attachments?</p> <p>13 A. I included everything that I used and</p> <p>14 documented. I documented no textbook references in</p> <p>15 the list of references that were included in my expert</p> <p>16 report.</p> <p>17 Q. Okay. What's your understanding of who</p> <p>18 has retained you in this matter? Is it just Teva or</p> <p>19 have all of the manufacturer defendants in this</p> <p>20 litigation retained you?</p> <p>21 MR. FOWLER: Objection.</p> <p>22 MS. KAPKE: Object to form.</p> <p>23 BY THE WITNESS:</p> <p>24 A. I was retained by Teva. I have no clear</p>
<p style="text-align: right;">Page 43</p> <p>1 A. My understanding of this is you are asking</p> <p>2 me, for example, if I had a -- a person ask about</p> <p>3 these impurities or if I sent a letter in regards to</p> <p>4 that.</p> <p>5 No. 1, I don't have to give you privileged</p> <p>6 information in the sense of things that are specific</p> <p>7 to a patient because we don't release information</p> <p>8 specific to patients to outside entities.</p> <p>9 No. 2, I don't have any written documents</p> <p>10 that I've had conversations with people in person and</p> <p>11 over the phone about this and all, but there is</p> <p>12 nothing to produce in regards to that.</p> <p>13 Q. Okay. Well, let -- let's take it</p> <p>14 stepwise, because No. 10 is documents that you've</p> <p>15 received, not ones that you've sent.</p> <p>16 So have -- are you aware of having</p> <p>17 received documents regarding nitrosamine impurities</p> <p>18 in -- in any ARB or other drug from any entity or</p> <p>19 person?</p> <p>20 A. No, I am not.</p> <p>21 Q. Okay. And then No. 11, I believe you</p> <p>22 touched on this, this is communications or documents</p> <p>23 to anyone regarding nitrosamine impurities.</p> <p>24 And is your answer that to the extent</p>	<p style="text-align: right;">Page 45</p> <p>1 understanding about other defendants, and I've -- I've</p> <p>2 never -- never focused on that. So my understanding</p> <p>3 that I was retained by Teva and -- and all, but there</p> <p>4 may be others involved.</p> <p>5 BY MR. DAVIS:</p> <p>6 Q. Okay. Have you -- in -- in preparing your</p> <p>7 report or preparing for your testimony today, have you</p> <p>8 talked with counsel for any of the other defendants?</p> <p>9 MR. FOWLER: Objection; form.</p> <p>10 BY THE WITNESS:</p> <p>11 A. What -- what are you -- what are you</p> <p>12 asking me? I mean, have I talked to --</p> <p>13 BY MR. DAVIS:</p> <p>14 Q. Sure. My -- well, let me -- let me</p> <p>15 rephrase it in a more particularized way, which is:</p> <p>16 In your work on this matter, have you had</p> <p>17 communications only with Teva attorneys at Greenberg</p> <p>18 Traurig or have you had any communications of any kind</p> <p>19 with counsel for the other defendants?</p> <p>20 MR. FOWLER: Objection; form.</p> <p>21 BY THE WITNESS:</p> <p>22 A. My conversations on this have been with</p> <p>23 Teva. There have been other counsel there, but I</p> <p>24 speak with Teva.</p>

<p style="text-align: right;">Page 46</p> <p>1 BY MR. DAVIS:</p> <p>2 Q. Okay. Have you ever had any</p> <p>3 communications with counsel for any of the other</p> <p>4 defendants that occurred outside of the presence of</p> <p>5 counsel for Teva?</p> <p>6 MR. FOWLER: Objection; form.</p> <p>7 BY THE WITNESS:</p> <p>8 A. I've never had any communication with any</p> <p>9 counsel outside of conversations or things that have</p> <p>10 occurred with Teva being there, Greenberg Traurig.</p> <p>11 BY MR. DAVIS:</p> <p>12 Q. Okay. And that includes written</p> <p>13 communications like e-mails?</p> <p>14 A. It really includes anything, everything.</p> <p>15 Q. Okay. Have you spoken with any other</p> <p>16 experts retained by the defense in this litigation?</p> <p>17 A. I have not spoken with any other experts</p> <p>18 retained.</p> <p>19 Q. How about written communications, like</p> <p>20 e-mails?</p> <p>21 A. I have not communicated in any form with</p> <p>22 any other experts in this case.</p> <p>23 Q. Okay. You did review a number of expert</p> <p>24 reports on -- on both sides, correct?</p>	<p style="text-align: right;">Page 48</p> <p>1 all opinions the witness will express and the basis</p> <p>2 and reasons for them.</p> <p>3 Do you feel your report complies with</p> <p>4 that?</p> <p>5 MR. FOWLER: Objection to form.</p> <p>6 BY THE WITNESS:</p> <p>7 A. My report complies with that statement up</p> <p>8 to the time that I -- I wrote the report. We don't</p> <p>9 stop learning and assimilating information and</p> <p>10 acquiring information at any one particular date. So</p> <p>11 my report up to the date I wrote that report is in</p> <p>12 compliance with that.</p> <p>13 BY MR. DAVIS:</p> <p>14 Q. Okay. And so it con -- it contains a</p> <p>15 complete statement of all of your opinions and the</p> <p>16 basis and reasons for them as of the date you signed</p> <p>17 it?</p> <p>18 A. My report complies with the Federal</p> <p>19 article you -- you mentioned, No. -- No. 26, as of the</p> <p>20 date that it was completed.</p> <p>21 Q. And to be clear, you haven't served any</p> <p>22 kind of updated, revised report since that date,</p> <p>23 correct?</p> <p>24 A. I have not served any updated, revised</p>
<p style="text-align: right;">Page 47</p> <p>1 A. I've reviewed some of the expert reports,</p> <p>2 correct.</p> <p>3 Q. Okay. Which of the defendants' expert</p> <p>4 reports have you reviewed?</p> <p>5 A. I don't remember offhand. It has been a</p> <p>6 while, so I don't know exactly which ones I reviewed.</p> <p>7 Q. Okay. Are you relying on any of the</p> <p>8 opinions expressed by any of these other defense</p> <p>9 experts in forming your own opinions?</p> <p>10 A. My opinion is expressed in my expert</p> <p>11 report and the way my testimony goes today is based</p> <p>12 on -- on my understanding and interpretation of -- of</p> <p>13 data and not re -- really relying on -- on other</p> <p>14 expert witness reports to guide me in any way.</p> <p>15 Q. In preparing your report, did you</p> <p>16 familiarize yourself with Federal Rule of Civil</p> <p>17 Procedure 26, which governs the scope and contents of</p> <p>18 your report?</p> <p>19 A. No, I mean, I did not familiarize my --</p> <p>20 myself with that.</p> <p>21 Q. Okay. Do you feel that your report</p> <p>22 complies with Rule 26(a)(2)(B)(1), and I'll phrase</p> <p>23 exactly what I'm talking about here, which requires</p> <p>24 that the report must contain a complete statement of</p>	<p style="text-align: right;">Page 49</p> <p>1 report since that date, no.</p> <p>2 Q. Let's go ahead and mark it. I'm marking</p> <p>3 your report as Plaintiff-Flack 3.</p> <p>4 (WHEREUPON, a certain document was</p> <p>5 marked Plaintiff-Flack Deposition</p> <p>6 Exhibit No. 3, for identification, as</p> <p>7 of 09/28/2021.)</p> <p>8 BY MR. DAVIS:</p> <p>9 Q. I assume you have a copy of your report</p> <p>10 printed out, Dr. Flack?</p> <p>11 A. Yes, I do.</p> <p>12 Q. Okay. Do you recognize this as your</p> <p>13 report which you appear to have signed August 2nd,</p> <p>14 2021?</p> <p>15 A. I recognize this as the report I signed,</p> <p>16 correct.</p> <p>17 Q. Okay. When did you start actually writing</p> <p>18 this report?</p> <p>19 A. Well, I previously stated that I started</p> <p>20 working on this during the month of June, in early</p> <p>21 June, and so my work started then and was completed by</p> <p>22 the date on my report.</p> <p>23 Q. Okay. But -- and that date is August 2nd?</p> <p>24 A. That's what the report says, yes.</p>

<p>Page 50</p> <p>1 Q. Let me refer you back to your invoice for 2 a second, the -- the first one that we have. 3 Do you see that, Dr. Flack? 4 A. I see it. 5 Q. Do you see the description of services for 6 those 43 and a half hours? 7 A. Yeah. 8 Q. Okay. It's -- it reads: 9 "Conduct research and review documents and 10 materials, prepare for and participate in meeting, 11 participate in telephone meeting." 12 Do you see that? 13 A. I see it. 14 Q. Okay. Is it -- am I to take that to mean 15 that you had not started writing your report as of 16 July 20th? 17 A. No, you are not to take it as that because 18 that's not the case. 19 Q. Okay. So even though it's not listed in 20 your description of services, you were, in fact, 21 writing your report prior to July 20th? 22 A. I was writing my report starting in June 23 of this past year. 24 Q. Okay. And while we have it up, as of</p>	<p>Page 52</p> <p>1 BY MR. DAVIS: 2 Q. Sorry. The conclusion that what was 3 erroneous? 4 A. The conclusion that I only gave 5 conclusions is erroneous. There is plenty of 6 rationale for why I came to the conclusions that I 7 did. 8 Q. Okay. Let's start at -- with just the 9 very first page of your report. 10 You -- you state in that first paragraph 11 that: "...each of my opinions is based on the 12 materials I have reviewed in connection with this 13 litigation, the methods and procedures of science, and 14 my knowledge of recognized medical and scientific 15 principles..." 16 And I'll continue: "Each opinion is 17 offered to articulate a sufficiently reliable basis 18 for my opinions concerning this case." 19 Do you see that? 20 A. I see it. 21 Q. Okay. And by "opinions" there, you mean 22 the opinions that are expressed in your report, 23 correct? 24 A. I'm talking about the opinions in my</p>
<p>Page 51</p> <p>1 July 20th, you had billed \$26,100 at a rate of \$600 2 per hour? 3 A. That would be correct. 4 Q. So when you signed your report on 5 August 2nd, did you feel that you had, in fact, 6 accomplished your assignment of setting forth your 7 opinions in compliance with Rule 26 as I read it? 8 MR. FOWLER: Objection; form. 9 BY THE WITNESS: 10 A. I had felt I had accomplished writing a 11 comprehensive report that was within the scope of what 12 I was asked to do. 13 BY MR. DAVIS: 14 Q. Okay. Did you endeavor just to list your 15 conclusions in the report or also to explain the 16 process by which you arrived at those conclusions? 17 MR. FOWLER: Objection; form. The report speaks 18 for itself. 19 BY THE WITNESS: 20 A. So my answer to that is that really the -- 21 it is pretty self-evident in there that, one, I not 22 only gave conclusions but I gave actual factual data 23 and interpretations that led to those conclusions. So 24 the premise that I only gave conclusions is erroneous.</p>	<p>Page 53</p> <p>1 report. 2 Q. And in coming to those opinions, did you 3 endeavor to discuss the facts and reference materials 4 that you found to be most important to you in coming 5 to those opinions? 6 A. Yes, I did. 7 Q. Do you feel like you wrote your report 8 carefully and with precision? 9 A. Anything that I write and put my name on I 10 write carefully with precision and care. 11 Q. And that includes the actual wording of 12 the report as well as the substantive content? 13 MR. FOWLER: Objection; form. 14 BY THE WITNESS: 15 A. That includes all of that. 16 BY MR. DAVIS: 17 Q. Did you give your report a detailed once 18 over or twice over before actually signing it when it 19 came time to sign? 20 A. By the time I write a report I read it and 21 worked on it many times more than a once or twice 22 over. So at the very end, you know, at some point you 23 finish it, abandon that, but there as been many 24 iterations that you -- you go through and you look at</p>

Page 54	Page 56
<p>1 it and so there is -- there is ongoing scrutiny. So</p> <p>2 it's not just a I write, write, write and then once or</p> <p>3 twice at the end I look at it.</p> <p>4 Q. Well, sure, I guess my -- my question is</p> <p>5 more geared towards prior to signing it, did you give</p> <p>6 it a thorough review to make sure that you had not</p> <p>7 missed anything important?</p> <p>8 MR. FOWLER: Objection; form.</p> <p>9 BY THE WITNESS:</p> <p>10 A. So -- so anything that I write, including</p> <p>11 this report, I'm very careful about what I write, what</p> <p>12 my interpretations are, how I write it, and -- and all</p> <p>13 in this report, again, is no exception to that.</p> <p>14 BY MR. DAVIS:</p> <p>15 Q. Okay. For example, in -- in that review</p> <p>16 process, did you check your references for accuracy as</p> <p>17 much as possible?</p> <p>18 A. You always check your references for</p> <p>19 accuracy, correct.</p> <p>20 Q. Okay. And that you didn't leave out any</p> <p>21 important reference?</p> <p>22 A. I don't know what you consider an</p> <p>23 important reference. I used references that I thought</p> <p>24 were -- were important. Somebody else might think</p>	<p>1 there are quite a few documents or even categories of</p> <p>2 documents listed in that Exhibit B that are not in</p> <p>3 your report, and I'll give an example, like the -- you</p> <p>4 reference a number of plaintiff bellwether documents</p> <p>5 for bellwether plaintiffs and their records in your</p> <p>6 materials considered, but I don't see any reference to</p> <p>7 that in -- in your report.</p> <p>8 Can you explain why that would be?</p> <p>9 MR. FOWLER: Object to the form of the question.</p> <p>10 BY THE WITNESS:</p> <p>11 A. First of all, when you are reviewing</p> <p>12 documents, literature in writing, you don't -- you</p> <p>13 don't reference everything that you read. You</p> <p>14 reference the most important documents. And I</p> <p>15 referenced the most important documents and anything</p> <p>16 else that was available to me was disclosed to you,</p> <p>17 but there -- there is no -- everybody who writes does</p> <p>18 it differently, and -- and all and I -- I did it the</p> <p>19 way that I am comfortable with doing it. I published</p> <p>20 over 210 papers and I am an associate editor for a</p> <p>21 journal and I know this process backwards and forwards</p> <p>22 how to write and communicate.</p> <p>23 Q. Sure. And I'm not challenging you on</p> <p>24 that. I'm just trying to understand what it means to</p>
Page 55	Page 57
<p>1 others are important. And so that is an unanswerable</p> <p>2 question for anyone other than myself.</p> <p>3 Q. Well, sure, and that's what I was asking,</p> <p>4 I guess. Let me rephrase it.</p> <p>5 Did you -- did you make sure that you did</p> <p>6 not leave out any reference that you thought was</p> <p>7 important in coming to your opinions as expressed in</p> <p>8 the report?</p> <p>9 A. Up to the time that I wrote the report, I</p> <p>10 included the references that I believed to be the</p> <p>11 important references, and I've continued to work since</p> <p>12 the report is -- is written as I should and am</p> <p>13 supposed to. So that doesn't preclude the fact</p> <p>14 that -- that I may find something else in the</p> <p>15 literature that's not in the report, but it doesn't</p> <p>16 invalidate what I did up to that point of August the</p> <p>17 2nd.</p> <p>18 Q. Okay. Well, let me -- let me ask it a</p> <p>19 slightly different way.</p> <p>20 You have an Exhibit B, a list of materials</p> <p>21 considered, correct? Do you -- do you understand that</p> <p>22 that's an attachment to your report, Dr. Flack?</p> <p>23 A. Yes.</p> <p>24 Q. Okay. And would you agree with me that</p>	<p>1 be -- to have made your list of materials considered.</p> <p>2 Is that -- are all of those things just</p> <p>3 things that you've reviewed and I think you -- as you</p> <p>4 testified just were made available to you, is that how</p> <p>5 I'm to understand that or does that not necessarily</p> <p>6 factor into your opinions?</p> <p>7 MR. FOWLER: Hold on. Object to the colloquy,</p> <p>8 object to the compound question. Can you ask a clear</p> <p>9 question, Counsel? I'm not following.</p> <p>10 MR. DAVIS: Well, hold on, the witness hasn't</p> <p>11 said it's not clear.</p> <p>12 BY MR. DAVIS:</p> <p>13 Q. Dr. Flack, did you understand my question?</p> <p>14 A. It's not clear.</p> <p>15 Q. Okay. So you -- you testified in a</p> <p>16 previous answer that those -- that the materials</p> <p>17 considered were documents that were made available to</p> <p>18 you, right?</p> <p>19 A. I considered documents from a variety of</p> <p>20 sources, including those that have been made available</p> <p>21 to me, as previously described.</p> <p>22 Q. Okay. And -- and my -- my question is:</p> <p>23 Are those -- did it make -- was it sufficient to make</p> <p>24 that list simply that you reviewed the document or am</p>

<p style="text-align: right;">Page 58</p> <p>1 I to interpret every single one of those documents as 2 something that you relied upon in forming your 3 opinions? 4 MR. FOWLER: Objection; form. 5 BY THE WITNESS: 6 A. Everything that was supplied to me did not 7 get extensively review. Some of it was cursorily 8 reviewed, some of it was not reviewed. You simply 9 have what was supplied to me. 10 BY MR. DAVIS: 11 Q. Okay. Thank you. I just am trying to get 12 an understanding there, and I think that clears it up. 13 Before I move into your CV, we -- we've 14 been going for more than an hour. Should we take a 15 quick break? Do you want to take a break, Dr. Flack, 16 before I jump into another set of questions? 17 A. Yeah, that's fine. 18 MR. DAVIS: Okay. Let's go off the record. 19 MR. FOWLER: Five, six minutes, Counsel? 20 MR. DAVIS: Are we off the record? 21 THE VIDEOGRAPHER: The time is 10:12 a m., off 22 the record. 23 (WHEREUPON, a recess was had 24 from 10:12 to 10:24 a m.)</p>	<p style="text-align: right;">Page 60</p> <p>1 Exhibit No. 4, for identification, as 2 of 09/28/2021.) 3 MR. FOWLER: And I've got a hard copy in front 4 of him, Counsel. 5 MR. DAVIS: Thank you. 6 BY MR. DAVIS: 7 Q. Okay. Do you recognize this as your CV, 8 Dr. Flack? 9 A. I recognize this as my CV. 10 Q. Okay. When is the last time you updated 11 this CV as it was produced to us? 12 A. It should be dated on the front. And it 13 was probably sometime in the summer, like spring or 14 summer. 15 Q. Sure. I -- I see just above your 16 signature June 28th, 2021. 17 A. That would be an approximate timeframe, 18 correct. 19 Q. Okay. Was this CV prepared specifically 20 for -- for this expert report assignment or is this 21 the CV that you have maintained as part of your -- 22 your work outside of this -- this litigation? 23 A. I maintain a CV that is almost never 24 tailored to any one specific request. This is just my</p>
<p style="text-align: right;">Page 59</p> <p>1 THE VIDEOGRAPHER: The time is 10:24 a m., on 2 the record. 3 BY MR. DAVIS: 4 Q. Okay. Dr. Flack, just a couple of cleanup 5 items before we move on. 6 You -- you had testified earlier that you 7 had served as an expert witness in four to five 8 medical malpractice cases, is that right? 9 A. That is correct. 10 Q. Okay. Did any of those cases have 11 anything to do with any of the issues in this 12 litigation? 13 A. None of the cases I previously served as 14 an expert witness had anything to do with this 15 litigation. 16 Q. Okay. Or any of the issues around 17 nitrosamines and cancer, anything like that? 18 A. None of the cases that I previously have 19 been an expert witness in had anything to do with this 20 litigation. 21 Q. Okay. I'm going to mark your CV as 22 Exhibit 4. 23 (WHEREUPON, a certain document was 24 marked Plaintiff-Flack Deposition</p>	<p style="text-align: right;">Page 61</p> <p>1 CV. It is as it is. 2 Q. Okay. Did you make any changes to it for 3 use in this litigation? 4 A. Did I make changes other than updating 5 things that may needed to be included, no. 6 Q. Okay. Can you briefly walk me through 7 your -- we'll start with your educational background. 8 Can you walk me through that in narrative 9 format, briefly? 10 A. So I went to Chickasha High School, 11 subsequently went to Langston University where I was a 12 chemistry major, math minor, football player; entered 13 medical school at the University of Oklahoma in 1978, 14 graduated in '82; enrolled in an internal medicine 15 residency there '82 to '85; '85 to '86 I was the chief 16 resident in medicine there; '86 to '88 I was on 17 faculty; and then I left for the University of 18 Minnesota where I did, again, National Institutes of 19 Health postdoctoral fellowship, cardiovascular 20 epidemiology, and finished my MPH there and have been 21 a faculty member there and other places ever since. 22 Q. Okay. Let's -- and let's discuss your 23 professional experience then. 24 You -- you started -- where -- where is</p>

<p style="text-align: right;">Page 62</p> <p>1 the University of Minnesota located?</p> <p>2 A. Minneapolis.</p> <p>3 Q. Okay. Is that where you would say your</p> <p>4 post-academic career started?</p> <p>5 A. No. My post-academic career started at</p> <p>6 Oklahoma. I started working on my MPH at Oklahoma</p> <p>7 University College of Health. I spent two years doing</p> <p>8 that as an instructor in the Department of Medicine</p> <p>9 before I moved on to finish my MPH. I completed my</p> <p>10 MPH post-doc in cardiovascular epi at the University</p> <p>11 of Minnesota.</p> <p>12 Q. Okay. What -- what years were you in --</p> <p>13 in Oklahoma?</p> <p>14 A. I was in medical school through the end of</p> <p>15 my faculty there between 1978 and 1988.</p> <p>16 Q. Okay. And then what years were you in</p> <p>17 Minnesota?</p> <p>18 A. I was in Minnesota between '88 to probably</p> <p>19 '94, a total of about six years.</p> <p>20 Q. Okay. And then after University of</p> <p>21 Minnesota, where did you go?</p> <p>22 A. I switched my education by that time and I</p> <p>23 spent three years at Wake Forest Bowman Gray before I</p> <p>24 moved to Wayne State in Detroit.</p>	<p style="text-align: right;">Page 64</p> <p>1 medicine, I am also certified as a specialist in</p> <p>2 clinical hypertension by the now defunct American</p> <p>3 Society of Hypertension, which was folded into AHA,</p> <p>4 American Heart Association, and I am president of the</p> <p>5 American Hypertension Specialist Certification</p> <p>6 Program.</p> <p>7 Q. Okay. Do you have any board</p> <p>8 certifications in oncology or anything cancer related?</p> <p>9 A. I have no certifications in oncology</p> <p>10 because I've never had anything other than residency</p> <p>11 training in oncology.</p> <p>12 Q. Okay. How about, to the extent they</p> <p>13 exist, any board certifications in toxicology or</p> <p>14 anything related to exposure to hazardous chemicals?</p> <p>15 A. I am not board certified in toxicology.</p> <p>16 Q. None of your research interests outside of</p> <p>17 this litigation involve nitrosamines or cancer, do</p> <p>18 they?</p> <p>19 MR. FOWLER: Objection; form.</p> <p>20 BY THE WITNESS:</p> <p>21 A. I have not conducted any research in</p> <p>22 nitrosamines, no.</p> <p>23 BY MR. DAVIS:</p> <p>24 Q. Okay. Looking through your CV, is it fair</p>
<p style="text-align: right;">Page 63</p> <p>1 Q. Okay. At Wayne State in Detroit, what</p> <p>2 was -- what years were you in Detroit?</p> <p>3 A. 1997 to 2015.</p> <p>4 Q. And you were on the faculty at Wayne</p> <p>5 State?</p> <p>6 A. On the faculty at Wayne State.</p> <p>7 Q. Okay. Did you have a private practice as</p> <p>8 well?</p> <p>9 A. I had a practice, a clinical practice</p> <p>10 there the entire time I was there.</p> <p>11 Q. Okay. What was the name of your clinical</p> <p>12 practice?</p> <p>13 A. I was director of the hypertension clinic.</p> <p>14 Q. The hypertension clinic at -- at where?</p> <p>15 A. At Wayne State.</p> <p>16 Q. Oh, at Wayne State. Okay.</p> <p>17 And then since 2015 to today, you've --</p> <p>18 you've been in Springfield, Illinois, is that right,</p> <p>19 at SIU?</p> <p>20 A. I've been at Southern Illinois since May</p> <p>21 of 2015.</p> <p>22 Q. Do you have any board certifications?</p> <p>23 A. Certified -- board certified by the</p> <p>24 American Board of Internal Medicine in internal</p>	<p style="text-align: right;">Page 65</p> <p>1 to say that you've received a lot of funding over the</p> <p>2 years from pharmaceutical companies?</p> <p>3 MR. FOWLER: Objection; form.</p> <p>4 BY THE WITNESS:</p> <p>5 A. From my perspective, I had received</p> <p>6 funding from a -- a range of sources and from a range</p> <p>7 of pharmaceutical companies to conduct varied</p> <p>8 research.</p> <p>9 BY MR. DAVIS:</p> <p>10 Q. And well, let's -- let's break it up, I</p> <p>11 guess.</p> <p>12 Would you agree that you've received</p> <p>13 funding from pharmaceutical companies in the form of</p> <p>14 research grants?</p> <p>15 A. Well, that question is pretty clear from</p> <p>16 my CV. Absolutely I have.</p> <p>17 Q. Okay. How about consulting work, speaker</p> <p>18 programs, advisory boards, things like that?</p> <p>19 A. I've done some advisory boards. The</p> <p>20 speaker bureau, I'm not on any speakers bureaus at --</p> <p>21 at present. That's all no. And so, yeah, I've --</p> <p>22 I've consulted with companies on -- on various things</p> <p>23 related to their products and research they are doing.</p> <p>24 Q. Okay. You mentioned you are not on any</p>

<p style="text-align: right;">Page 66</p> <p>1 speakers bureaus at present.</p> <p>2 Were you in the past on speakers bureaus?</p> <p>3 A. Yes, I was on speakers bureaus in the</p> <p>4 past, but I -- I no longer do that.</p> <p>5 Q. Why don't you do that any longer?</p> <p>6 A. One, I don't really have time to do it</p> <p>7 because the pharmaceutical industry in certain areas</p> <p>8 has -- has, one, they have de-emphasized speakers</p> <p>9 bureaus and, two, they are -- they are promotional,</p> <p>10 and when I talk, I am not really interested in being</p> <p>11 promotional. So any talking that I do is typically</p> <p>12 done under organizations like the American Heart</p> <p>13 Association or -- or other organizations. Sometimes</p> <p>14 pharmaceuticals may sponsor certain things, but that's</p> <p>15 rare that I work directly with a pharmaceutical</p> <p>16 company at a speaking engagement.</p> <p>17 Q. Okay. Do you have any understanding of</p> <p>18 why pharmaceutical companies have de-emphasized</p> <p>19 speakers programs?</p> <p>20 MR. FOWLER: Objection; form, speculation.</p> <p>21 BY THE WITNESS:</p> <p>22 A. Yeah, I think everybody pretty much knows</p> <p>23 that the FDA cracked down the -- also, two, the</p> <p>24 individual practitioner is less of a control factor</p>	<p style="text-align: right;">Page 68</p> <p>1 A. I would guess that it was probably</p> <p>2 somewhere around 2008, 2010 when -- when I was no</p> <p>3 longer doing it.</p> <p>4 Q. Do you recall what year you started</p> <p>5 participating in speakers bureaus?</p> <p>6 A. I started in 1986 when I joined the</p> <p>7 faculty at the University of Oklahoma.</p> <p>8 Q. And to be clear, that's when you started</p> <p>9 participating in speakers bureaus for pharmaceutical</p> <p>10 companies?</p> <p>11 A. Correct.</p> <p>12 Q. Okay. And your testimony is that you</p> <p>13 still do consulting work for various pharmaceutical</p> <p>14 companies, is that right?</p> <p>15 A. I do for -- for pharmaceutical companies,</p> <p>16 device companies, I've done consulting related to --</p> <p>17 typically related to research that's ongoing.</p> <p>18 Q. Would you have also started that</p> <p>19 consulting work back in 1986 or was that a different</p> <p>20 start date?</p> <p>21 A. Well, the people who get called in for</p> <p>22 consulting are typically people who have an</p> <p>23 established track record and a clear footprint in --</p> <p>24 in the field. So it takes a while to do that. So a</p>
<p style="text-align: right;">Page 67</p> <p>1 and who writes what prescriptions now, a lot of that</p> <p>2 is controlled on what's on the formulary, decision is</p> <p>3 made oftentimes outside of the practitioner.</p> <p>4 So the approach that pharmaceutical</p> <p>5 companies have taken to actually promote their</p> <p>6 products has just morphed over time in an explainable</p> <p>7 way, understandable way.</p> <p>8 BY MR. DAVIS:</p> <p>9 Q. Okay. But you did mention that part of</p> <p>10 the reason for that de-emphasizing is because they got</p> <p>11 in a lot of trouble over it, right?</p> <p>12 MR. FOWLER: Objection; form, mischaracterizes</p> <p>13 the testimony.</p> <p>14 BY THE WITNESS:</p> <p>15 A. There are -- there are a variety of</p> <p>16 reasons, including the FDA crackdowns that really</p> <p>17 forced a change in how pharmaceutical companies</p> <p>18 sponsor lectures and give promotion and now the -- the</p> <p>19 issue of promotion is -- has been de-emphasized and</p> <p>20 it's really not something that I'm engaged in at -- at</p> <p>21 this point.</p> <p>22 BY MR. DAVIS:</p> <p>23 Q. About what year did you stop participating</p> <p>24 in speakers bureaus for pharmaceutical companies?</p>	<p style="text-align: right;">Page 69</p> <p>1 lot of the consulting probably did not start until</p> <p>2 sometime in -- in the 1990s because I needed time to</p> <p>3 really develop a footprint and a reputation in the</p> <p>4 field.</p> <p>5 Q. What about advisory boards?</p> <p>6 A. Yeah, I've done advisory boards from how</p> <p>7 to recruit into clinical research, I've done advisory</p> <p>8 boards where I've -- I've sat on mock FDA panels</p> <p>9 because I spent three years, I believe about three</p> <p>10 years as a standing member of the FDA cardiorenal</p> <p>11 advisory panel, and -- and also I've been on advisory</p> <p>12 boards where companies are taking their product to the</p> <p>13 FDA and they put together a mock FDA panel or a couple</p> <p>14 of them before they go and because of my experience</p> <p>15 I've served on those.</p> <p>16 Q. Okay. Do you currently still serve on</p> <p>17 pharmaceutical company advisory boards?</p> <p>18 A. So typically the advisory boards are ad</p> <p>19 hoc as opposed to standing, and so am I on any</p> <p>20 standing advisory boards at this moment, no.</p> <p>21 Q. When is the last ad hoc pharmaceutical</p> <p>22 company advisory board that you've participated in?</p> <p>23 A. I participated in an advisory board about</p> <p>24 two weeks ago with Amgen on their RISE program which</p>

<p style="text-align: right;">Page 70</p> <p>1 was looking at how to recruit African Americans into 2 their clinical research program so they had better 3 representation in their trials before they went to the 4 FDA for approval. 5 Q. Okay. Did you receive any kind of 6 honorarium or payment for that advisory board that you 7 sat on for Amgen? 8 A. You know my time is valuable and that I -- 9 I get paid when -- when I -- when I do this, and of 10 course I got paid to do it. 11 Q. Okay. And that's the case for -- for all 12 of these categories of pharmaceutical 13 industry-supported items we went through, like 14 speakers bureaus, consulting, advisory boards, those 15 all come with -- with payment, correct? 16 A. I am on an advisory board most of the time 17 I've been paid. There are a couple of times I 18 haven't, but it was typically a very young company and 19 I was just interested in what they were doing and 20 beyond expenses I didn't get payment. 21 Q. Okay. Let's go to the grants and 22 contracts portion of your report around page -- it 23 starts at the bottom of Page 23. And let's start with 24 the active -- I see that you've broken it down by</p>	<p style="text-align: right;">Page 72</p> <p>1 Q. Okay. I've noticed that some of the 2 numbers across this Grants and -- and Research section 3 of your report have parentheses around them and some 4 don't. 5 Is the parenthetical meant to signify 6 anything or is that just using parentheses sometimes 7 but not others? 8 A. Well, it's not really meant to signify 9 anything except that was the estimate. Some of the 10 grants you -- you basically get paid for recruiting 11 participants, so you don't really know the work of the 12 grant until you've finished your recruitment, so it is 13 really harder to estimate. So a lot of times there 14 may not be a number there, occasionally there -- there 15 might be, but there -- there is no special meaning to 16 it. 17 Q. Okay. Do you own or -- or partially own 18 an -- any entity? 19 A. I'm not sure I understand your question. 20 What entity are you talking about? 21 Q. Well, I'm asking if you are the owner or 22 partial owner of any business entity, LLP, LLC, 23 corporation? 24 A. No, I'm not a part owner of anything</p>
<p style="text-align: right;">Page 71</p> <p>1 active, pending review, submitted but unfunded and 2 then completed. 3 Do you see that, and that it extends 4 through about Page 34 of your report from Page 23? 5 A. Yes. 6 MR. FOWLER: You keep saying "report," Counsel. 7 CV. 8 MR. DAVIS: Sorry. CV. My apologies. 9 BY MR. DAVIS: 10 Q. So let's start with the active ones. Can 11 you tell me what "FTE" means? 12 A. Full-time equivalent. 13 Q. Gotcha. Okay. So that's a measure of 14 your time? 15 A. A measure of my time commitment. 16 Q. Understood. 17 Take a look at No. 3, which is the study 18 that's sponsored by GlaxoSmithKline. 19 Do you see that? 20 A. I see it. 21 Q. Okay. Next to GlaxoSmithKline there is a 22 parenthetical that says "(approximately \$210,000)." 23 Do you see that? 24 A. Yes.</p>	<p style="text-align: right;">Page 73</p> <p>1 unless you consider -- 2 MR. DAVIS: Hey, Stephen, you might want to mute 3 yourself so you don't get an echo. 4 MR. FOWLER: That was -- that was accidental. 5 BY THE WITNESS: 6 A. -- my wife's law firm which is run out of 7 our house. She is a corporate lawyer. But other than 8 that, no. 9 BY MR. DAVIS: 10 Q. Let's focus on just one company for a 11 moment, which is Novartis. 12 Is it fair to say that -- that Novartis 13 has given you millions of dollars in the form of 14 research grants over the years? 15 MR. FOWLER: Objection; form. 16 BY THE WITNESS: 17 A. No, it wouldn't be fair to say and there 18 is no evidence of that even remotely in my C -- in my 19 CV. 20 BY MR. DAVIS: 21 Q. Well, let's -- let's take a look at the 22 completed portions of your grants and contracts which 23 starts on Page 26. 24 You'll see No. 3 there, which is a study</p>

<p style="text-align: right;">Page 74</p> <p>1 titled "Vitamin D Augmentation of Tekturna in 2 Hypertension"? 3 A. Correct. 4 Q. Do you that see the funder there is 5 Novartis? 6 A. Yes, I see it. 7 Q. And the funding amount is \$512,000 -- 8 \$512,733? 9 A. I see that. 10 Q. Okay. And then further down on the same 11 page, No. 5. So -- 12 A. Let's -- let's -- let's go look at it a 13 little further though. So essentially what happened 14 in this is we got very little of the funding because 15 through the Altitude study and the really crashing and 16 burning of aliskiren, and so the initial funding that 17 they promised they pulled and we only -- we probably 18 didn't get \$25,000 in that. So that was the initial 19 funding amount, but that is not what we received 20 because of what they -- they did. 21 Q. And -- and the reason they pulled the 22 funding was -- was why again? 23 A. Because they had a couple of studies that 24 came out with the drug aliskiren, a direct renin</p>	<p style="text-align: right;">Page 76</p> <p>1 \$42,000. 2 Do you see that? 3 A. Yes, I see that. 4 Q. Okay. Did that one actually get funded? 5 A. Yeah, that's a legitimate study. 6 Q. And then what about on Page 33, a Sandoz 7 study, do you -- do you -- is it your understanding 8 that Sandoz is owned by Novartis? 9 A. I have no clue who Sandoz is owned by. I 10 know they are no longer in existence and I've never 11 equated Sandoz with Novartis. 12 Q. Okay. Well, nevertheless, do you -- do 13 you see that stun -- study had a funding amount of 14 almost \$760,000? 15 A. Where is this? 16 Q. Page 33 of your CV, No. 39. 17 A. So -- so the -- the MIDAS study, one, I 18 was -- this actually occurred during the time I was a 19 postdoctoral fellow at the University of Minnesota, I 20 was a -- a co-PI with my mentor, and that was very 21 early in my career, so yeah. 22 Q. Okay. Let me just rattle off a few other 23 companies, has MSP Singapore Merck made research 24 grants to you?</p>
<p style="text-align: right;">Page 75</p> <p>1 inhibitor, that really cast a bad light on the drug, 2 and they really just backed off of it, decided that 3 they really weren't going to promote it, and in 4 parallel they weren't going to invest in any science 5 to try to understand the drug better. That's where 6 our study was, is a study to understand the drug 7 better. 8 Q. Okay. So -- so why is this in the 9 completed portion of grants and contracts and not in 10 the submitted but unfunded portion? 11 A. Well, because it -- it was funded but 12 it -- it's a unique situation in that once it was 13 funded, it was partially funded and then essentially 14 Novartis backed out of the funding commitment when 15 they pretty much abandoned this drug. 16 Q. Understood. 17 So would that be the same case for No. 5 18 there, also a Tekturna study, \$53,000? 19 A. That was a -- a study that I -- I think we 20 probably went on and did that. We weren't the -- the 21 primary -- we were a subcontracting with Beaumont, but 22 we -- we probably got the funding for this. 23 Q. Okay. What about the one on Page 29, 24 No. 15, which is a Lotrel study funded by Novartis for</p>	<p style="text-align: right;">Page 77</p> <p>1 MR. FOWLER: Form. 2 BY THE WITNESS: 3 A. I don't recognize that. 4 BY MR. DAVIS: 5 Q. AstraZeneca? 6 MR. FOWLER: Same. 7 BY THE WITNESS 8 A. It may -- if it's listed on my CV, yeah. 9 If not, no. 10 BY MR. DAVIS: 11 Q. Pfizer? 12 MR. FOWLER: Same objection. 13 BY THE WITNESS: 14 A. I've done research for Pfizer. 15 BY MR. DAVIS: 16 Q. GlaxoSmithKline and Smithkline Beecham? 17 A. If I haven't done research with them, my 18 CV is inaccurate. My CV is accurate. 19 Q. Sanofi Aventis? 20 MR. FOWLER: Same objection. 21 BY THE WITNESS: 22 A. Yeah, I've done work with them. 23 BY MR. DAVIS: 24 Q. Novo Nordisk?</p>

<p style="text-align: right;">Page 78</p> <p>1 MR. FOWLER: Same objection. 2 BY THE WITNESS: 3 A. If it's on my CV, I've done work with 4 them. 5 BY MR. DAVIS: 6 Q. Have you ever conducted or participated in 7 a study that had anything to do with NDMA, NDEA or 8 nitrosamines generally? 9 A. I have never participated, conducted 10 research in that area. 11 Q. Okay. Have you ever conducted or 12 participated in a study that had anything to do with 13 examining the carcinogenic potential of any chemical 14 whatsoever? 15 A. Directly have I ever done that in -- in 16 carcinogenic potential, no, but my training has 17 equipped me with the tools to be able to work across 18 disciplines and to understand exposure and to relate 19 to animal studies. 20 Q. Do you have any plans to ever conduct a -- 21 a study outside this litigation regarding 22 nitrosamines, NDMA or NDEA? 23 A. It is easy to predict things except about 24 the future, and I -- so I don't really try to predict</p>	<p style="text-align: right;">Page 80</p> <p>1 patients and teaching in that setting, but I have 2 never made more than my academic salary from 3 consulting. 4 Q. What about speaking? 5 A. I -- I have never made more outside 6 consulting, speaking, or any of those things 7 altogether relative to my academic salary. 8 Q. You -- you were a speaker for Novartis 9 at -- at one point, were you not? 10 A. Yeah, years ago. 11 Q. Okay. And -- and Novartis is the 12 manufacturer of Diovan, Exforge? 13 A. Correct. 14 Q. The brand manufacturer, correct? 15 A. Correct. 16 Q. Okay. Were you on the Novartis speaker 17 bureau at one point in time? 18 A. I may have been on their speakers bureau, 19 but it would have been years ago. 20 Q. I believe you said you stopped speaking 21 generally around 2010, is that right, would that have 22 been when you stopped speaking for Novartis? 23 A. Any speaking that I've done or their 24 speakers bureau would have been before then.</p>
<p style="text-align: right;">Page 79</p> <p>1 the future, but it is not an area that I have ever 2 worked in or likely will. 3 Q. Let's go back to your speaking and 4 consulting services for pharmaceutical companies for a 5 bit. 6 Over the various it sounds like decades 7 that you did that, can you provide an estimate of how 8 much money you received in total for -- for that work? 9 MR. FOWLER: Objection to the colloquy. 10 Go ahead. 11 BY THE WITNESS: 12 A. No, I have no clue. 13 BY MR. DAVIS: 14 Q. Do you think it's hundreds of thousands of 15 dollars? 16 A. I don't have a clue. 17 Q. Okay. Has there ever been a year where 18 you've earned more money by speaking, consulting for 19 pharmaceutical companies than you did by treating 20 patients? 21 A. Well, first of all, the way my salary is 22 structured, only a portion of my salary comes from 23 treating patients. I have salary that's related to 24 all of my academic duties that may include treating</p>	<p style="text-align: right;">Page 81</p> <p>1 Q. Okay. You don't recall being a national 2 speaker for Novartis, as they termed it? 3 A. I may have been on their speakers bureau 4 and given my standing in the field, I may have been a 5 national speaker, but I don't remember. 6 Q. Okay. Did you receive honoraria or 7 payments for that speaking for Novartis? 8 MR. FOWLER: Objection; asked and answered. 9 BY THE WITNESS: 10 A. My time is valuable. When I consult 11 typically I receive payment, not 100 percent of the 12 time. If it's something that I'm interested in and 13 I -- it is more from a scientific perspective, but 14 most of the time I do receive compensation. 15 BY MR. DAVIS: 16 Q. What was the primary purpose in your mind 17 of serving as a Novartis speaker? 18 MR. FOWLER: Objection to the form. 19 BY THE WITNESS: 20 A. To educate. 21 BY MR. DAVIS: 22 Q. To educate? 23 A. To educate. 24 Q. So that you wouldn't say the primary</p>

Page 88

Row	Value (approx. %)
1	85
2	95
3	98
4	92
5	95
6	35
7	45
8	10
9	20
10	75
11	35
12	10
13	85
14	95
15	90
16	15
17	70
18	40
19	10
20	90
21	95
22	98
23	95
24	90
25	45
26	35
27	10
28	90

Page 89

Category	Value (approximate percentage)
1	85
2	35
3	70
4	95
5	92
6	80
7	90
8	95
9	75
10	88
11	90
12	30
13	78
14	85
15	90
16	25
17	85
18	20
19	38
20	82
21	90
22	32
23	58
24	28

Page 90

[REDACTED]

Page 92

[REDACTED]

Page 91

[REDACTED]

Page 93

[REDACTED]

Page 96

Row	Bar Length (approx. %)
1	85
2	50
3	35
4	10
5	85
6	75
7	98
8	95
9	40
10	48
11	15
12	15
13	80
14	95
15	80
16	48
17	15
18	15
19	95
20	55
21	15
22	15
23	15
24	95
25	88
26	45
27	58
28	35

Page 97

Page 98

[REDACTED]

Page 100

[REDACTED]

Page 99

[REDACTED]

Page 101

[REDACTED]

3 Q. Okay. Let's -- let's talk about some of

4 the literature you've -- you've written.

5 You've written favorably about Diovan in

6 studies funded by Novartis, have you not?

7 MR. FOWLER: Objection; form, lack of

8 foundation.

9 BY THE WITNESS:

10 A. I -- I have not written favorably about

11 any drug or any class by any manufacturer that was not

12 justified by the evidence.

13 BY MR. DAVIS:

14 Q. I'm going to mark Exhibit 8.

15 (WHEREUPON, a certain document was

16 marked Plaintiff-Flack Deposition

17 Exhibit No. 8, for identification, as

18 of 09/28/2021.)

19 BY MR. DAVIS:

20 Q. Okay. Let me share my screen on this.

21 Do you recognize this as a article

22 that's -- you cite in the literature section of your

23 CV?

24 A. Yes, yes.

Page 102

1 Q. Okay. And you are the primary author on
2 this article it appears?

3 A. The primary, I'm the primary author on the
4 article.

5 Q. Okay. Do you recognize that four of the
6 five other coauthors of yours are Novartis employees?

7 A. Yes. They sponsored the study and four of
8 the five, let's see, Dave Calhoun is not, the others I
9 recognize briefly -- I -- I know Hilkert more than the
10 others.

11 Q. Did -- this might be a simple question,
12 but by being listed as coauthors, did those Novartis
13 personnel assist in the drafting of the manuscript?

14 A. Of course, to be a coauthor you have to
15 participate meaningfully in the development of the
16 manuscript.

17 Q. Okay. And you'll see that the study was
18 supported by Novartis Pharma AG?

19 Do you see that?

20 A. Yes, yes.

21 Q. Does that mean financially supported?

22 A. Yes.

23 Q. Okay. Do you recall the conclusion of
24 this study?

Page 103

1 A. Why don't you pull it up.

2 Q. Sure.

3 Is the -- and I'm paraphrasing here, but
4 is the study conclusion generally that combination
5 therapy of amlodipine val -- valsartan is more
6 favorable than amlodipine monotherapy?

7 MR. FOWLER: Objection to the form. And,
8 Counsel, as presented, nobody can read that. That
9 script --

10 MR. DAVIS: Oh, my -- my apologies. Let me zoom
11 in a little bit more.

12 MR. FOWLER: You have to do better than that.
13 It is -- it is still, like, a 6 font. There you go.
14 That's getting better. Thank you.

15 BY MR. DAVIS:

16 Q. Okay. Dr. Flack, if you can't read
17 something let -- let me know because it appears on my
18 screen differently than your screen.

19 A. Okay.

20 Q. Do you see the -- do you see the statement
21 that combination therapy with amlodipine and valsartan
22 lowered BP more effectively than amlodipine alone with
23 a favorable safety profile comparable to -- or
24 comparable, I guess, rather, to amlodipine

Page 104

1 monotherapy?

2 A. Yes, I do.

3 Q. Okay. Would you agree that that
4 conclusion is favorable to the use of -- of Diovan or
5 valsartan in this case?

6 MR. FOWLER: Objection; form, mischaracterizing.

7 BY THE WITNESS:

8 A. So, would I agree? Here -- here is --
9 here is what I would say in response to that. That
10 conclusion is supported by the data in the study. If
11 I conclude that any calcium blocker and ACE inhibitor
12 or in combination is not more effective than the
13 calcium blocker alone, I would have to be creating
14 fiction because there is not one combination that you
15 can use like that that would not beat the single drug
16 therapy.

17 So making a positive statement that's
18 supported by the data is nothing underhanded,
19 nefarious or misleading. It is just absolutely
20 correct. And this drug to this date is an excellent
21 drug.

22 The other --

23 BY MR. DAVIS:

24 Q. Thank you.

Page 105

1 A. The other thing --

2 Q. Let me -- let me --

3 A. Hold on, Counsel.

4 Q. I'm sorry. Go ahead.

5 A. The combination not only lowers blood
6 pressure, but the inclusion of valsartan actually
7 minimizes the calcium blocker induced edema. So if
8 this is an example of me saying something favorable,
9 I'm not going to say something not favorable that's
10 not true. This is basically go back to the tables, it
11 is supported solely by the facts, and I rest my case.

12 Q. Okay. Thank you for that.

13 Do you see the conflict of interest
14 section there?

15 A. I see it.

16 Q. Okay. You are -- you're JMF, correct?

17 A. Yes.

18 Q. Okay. And it says that you have received
19 grant and research support and/or as a consultant and
20 speaker for Novartis, Merck, Pfizer, GlaxoSmithKline,
21 AstraZeneca, Solvay, Bristol-Myers Squibb, CVRx,
22 Genzyme, Daiichi Sankyo and -- and Myogen.

23 Do you see that?

24 A. That's what it says on the paper there.

<p style="text-align: right;">Page 106</p> <p>1 Q. Okay. Is that -- is that statement 2 accurate? 3 A. That's what it says on the paper and I 4 give accurate information when I do those. 5 Q. Okay. Turning back to your CV, which is, 6 I believe, Exhibit 4, if you have that in front of 7 you. 8 Your bibliography, which starts on Page 34 9 and goes through Page 50, it has 194 entries on it. 10 Do you see that? 11 A. Well, it is 194 peer-reviewed articles, 12 there is probably about 20 book chapters in all, so 13 the 194 is not inclusive of all of my peer reviewed 14 work. 15 Q. Okay. Well, that actually catches my next 16 question, which is your report said about 210 or so. 17 So were you including in the 210 the 18 articles, peer-reviewed book chapters, is it anything 19 peer reviewed in your report? 20 A. It is articles and book chapters. 21 Q. Okay. 22 A. And if you add 194 and 20, it is actually 23 214. 24 Q. Okay. Thank you.</p>	<p style="text-align: right;">Page 108</p> <p>1 hypertension and cancer, not just any what you contend 2 to be shared risk factors? 3 MR. FOWLER: Objection to form. 4 BY THE WITNESS: 5 A. Well, first of all, it is not what I 6 contend. It is what is actually accepted and known, 7 and obesity, diabetes mellitus, which is common of low 8 physical activity, certain intakes of dietary 9 constituents, from salt to fat, I have studied those 10 things in my hypertension work and am very, very 11 familiar with them and there are shared risk factors 12 for several other diseases, including cancer. 13 BY MR. DAVIS: 14 Q. Okay. Have -- has any of your -- have any 15 of the 214 articles specifically discussed what you 16 call those shared risk -- risk factors and cancer 17 specifically or is that separate from your published 18 work? 19 A. Do you want me to state -- 20 MR. FOWLER: Objection to form. 21 BY THE WITNESS: 22 A. Do you want me to say it again? You tell 23 me, because I'm not going to give you an answer any 24 different, so tell me if you want me to say it again.</p>
<p style="text-align: right;">Page 107</p> <p>1 Have any of those 214 peer-reviewed items 2 that you list in your CV, have they addressed, any of 3 them, NDEA, NDMA or nitrosamines at all? 4 A. I don't know. What did your review tell 5 you? 6 Q. Well, you -- you are the one who wrote 7 them. I didn't read all of them. 8 A. Yeah, your question, of course, I have not 9 done work in that. I have stated previously I haven't 10 done work in NDMA and nitrosamines. 11 Q. Okay. How about the association between 12 hypertension and cancer, have any of your 214 13 peer-reviewed items addressed hypertension and cancer 14 specifically? 15 A. Indirectly, yes. My -- my work has 16 repeatedly talked about risk factors, lifestyle 17 modification, diet, exercise, physical activity, and 18 those are shared risk factors between hypertension and 19 cancer. So I am intimately familiar with the diet and 20 lifestyle commonalities between the two entities. 21 Q. Let me make my question a little more 22 specific. 23 Has -- has -- have any of the 214 24 peer-reviewed items specifically addressed</p>	<p style="text-align: right;">Page 109</p> <p>1 BY MR. DAVIS: 2 Q. Well, sure, can -- I guess -- well, let me 3 ask if a different way. 4 Can you point me to one of these 214 5 articles where you actually discuss the association 6 between hypertension and cancer specifically? 7 MR. FOWLER: Objection; form. 8 BY THE WITNESS: 9 A. The focus of my articles has not been on 10 hypertension and cancer. The focus of my articles, 11 though, has been on hypertension, lifestyle, diet and 12 comorbidities that have been linked to cancer. 13 Does that answer your question? 14 BY MR. DAVIS: 15 Q. Partially. 16 How about have you discussed the link, as 17 you call it, in those articles specifically -- 18 MR. FOWLER: Objection to form. 19 BY MR. DAVIS: 20 Q. -- the link between the various things you 21 mentioned and cancer? 22 MR. FOWLER: Same. 23 BY MR. DAVIS: 24 Q. Has that been discussed specifically in</p>

<p style="text-align: right;">Page 110</p> <p>1 any of your articles?</p> <p>2 MR. FOWLER: Same.</p> <p>3 BY THE WITNESS:</p> <p>4 A. I have not written specifically on these</p> <p>5 risk factors and cancer, but I'm intimately familiar</p> <p>6 with them because of my work in hypertension.</p> <p>7 BY MR. DAVIS:</p> <p>8 Q. Okay. Thank you.</p> <p>9 Have any of your articles addressed the</p> <p>10 causation of cancer due to exposure to carcinogenic</p> <p>11 chemicals at all?</p> <p>12 A. Oh, no, I'd have to look at my -- my CV.</p> <p>13 Oh, no, actually, it hasn't, because I don't work in</p> <p>14 that area.</p> <p>15 Q. Okay. Thank you.</p> <p>16 You've mentioned as part of going through</p> <p>17 your -- your educational history that you have a -- an</p> <p>18 MPH. What is an MPH?</p> <p>19 A. I have a Master of Public Health in</p> <p>20 epidemiology. It is the ability to look at datasets,</p> <p>21 work with datasets, study epidemiologic associations,</p> <p>22 and I'm also a clinical trialist as well. But I am</p> <p>23 well versed in all types of studies, from database</p> <p>24 studies to clinical trials and subgroup analysis and</p>	<p style="text-align: right;">Page 112</p> <p>1 dataset, that's clinical epi, but neither one is a</p> <p>2 randomized trial. You are just observing in different</p> <p>3 settings and reporting and trying to remove as much</p> <p>4 bias as you can.</p> <p>5 Q. So I guess it's in the -- the difference</p> <p>6 is how you go about looking at the -- at the evidence,</p> <p>7 is that what you would say, one is --</p> <p>8 A. No, no. What I said was the -- they are</p> <p>9 both observational, they are just different locations.</p> <p>10 Q. So I guess maybe -- maybe this will help</p> <p>11 me understand.</p> <p>12 Can you just walk me through -- first</p> <p>13 start with an observe -- observational ep- --</p> <p>14 epidemiology study, walk me through kind of what the</p> <p>15 basic ingredients of that would be, and then do the</p> <p>16 same thing for a clinical epi study so that I can</p> <p>17 understand exactly what you are talking about.</p> <p>18 A. So if you look at our work in NHANES, the</p> <p>19 hypertension paper we published in the premier</p> <p>20 hypertension journal in the world, we published the</p> <p>21 first population-based risk estimates for refractory</p> <p>22 and resistant hypertension. We downloaded eight</p> <p>23 cycles of NHANES, that's done every couple of years,</p> <p>24 and it's a public use dataset.</p>
<p style="text-align: right;">Page 111</p> <p>1 anything in between.</p> <p>2 Q. In your words, what is epidemiology?</p> <p>3 A. Epidemiology is a descriptive science by</p> <p>4 and large for the most part. Observational</p> <p>5 epidemiology is not an experiment. And then there are</p> <p>6 things that are linked to epidemiology which become</p> <p>7 more experimental. Most of your clinical databases</p> <p>8 are not. They are -- they are just clinical epi and</p> <p>9 you have to take certain steps to try to make them</p> <p>10 mimic a randomized trial.</p> <p>11 Q. Forgive me if I'm a little slow in</p> <p>12 following you.</p> <p>13 So you -- you've basically discussed I</p> <p>14 guess two forms of practicing epidemiological science,</p> <p>15 one being observational and one being clinical?</p> <p>16 A. Yeah, they are both observational for the</p> <p>17 most part. They are just done in different settings.</p> <p>18 So observational epidemiology is like when we publish</p> <p>19 on the NHANES, National Health and Nutrition</p> <p>20 Examination Survey, which I did with Michael</p> <p>21 Buhnerkempe in our group on hypertension. That's</p> <p>22 observational epi.</p> <p>23 When we report on factors that antagonize</p> <p>24 pharmacologic blood pressure control in the clinical</p>	<p style="text-align: right;">Page 113</p> <p>1 So what the government does is the</p> <p>2 government goes and employs fancy sampling techniques</p> <p>3 which allow you to make estimates for the entire</p> <p>4 population off of a few thousand people. They have</p> <p>5 removed a lot of the bias by the weight of the sample</p> <p>6 and so you can take those observations and you can</p> <p>7 extrapolate to the entire US population.</p> <p>8 When I do a clinical epi study, typically</p> <p>9 we are using a de-identified clinical database that</p> <p>10 looks at us following patients with certain diseases,</p> <p>11 condition -- conditions and treatment. And the</p> <p>12 problem there is very different because people who get</p> <p>13 different treatments tend to be different from one</p> <p>14 another. There is a reason people get calcium</p> <p>15 blockers versus ace inhibitors versus diuretics.</p> <p>16 So when we work in those datasets, we have</p> <p>17 to undertake a variety of techniques to ensure that</p> <p>18 the conclusions we are making, the observations that</p> <p>19 we are putting forth are unbiased and minimally biased</p> <p>20 as much as we can make them. It is dirtier data, it</p> <p>21 is like dietary data and occupational data where</p> <p>22 you've got a fair amount of confounding issues and</p> <p>23 confounding by indication for various treatments, but</p> <p>24 we know how to do all of that in the dataset that</p>

Page 114

1 we've been working in. And if we work in a dataset we
2 look at something, and we are not really equipped or
3 the dataset is just not suited for it and we are not
4 in it to try to do something just to get a
5 publication.

6 Q. Okay. How do you find -- so in that
7 clinical example, you said that it's, you know, kind
8 of drawing from a range of different datasets.

9 How do you identify those datasets to --
10 in order to analyze them?

11 A. For clinical data we actually have
12 de-identified clinical database that spans about
13 17 years of -- of patients that has longitudinal
14 follow-up that we have published from repeatedly; and
15 also, two, we have project ongoing at my current
16 institution where we've developed one for primary
17 aldosteronism with our endocrinology division which is
18 a -- a clinical and research interest of mine,
19 clinical and subclinical primary aldosteronism.

20 Q. So for -- for a task like the one you did
21 in this case where you are looking at a -- a range of
22 articles and trying to draw epidemiological
23 conclusions based on synthesizing them, which -- which
24 one of those epi studies would that fall under?

Page 115

1 A. So the strongest evidence in the
2 valsartan, valsartan impurity with NDMA category
3 really falls under the large cohort studies done in
4 Europe in their nationalized health systems where you
5 have exposure data both before and -- the study
6 started and for a period of time you have the claims
7 data and you can make the linkage all in one dataset.
8 You really can't do that very well here in the
9 United States with our fragmented health system
10 outside of maybe some selected populations.

11 Q. Well, let me -- and -- and we'll get into
12 the -- the actual studies in a bit, but I'm just
13 trying to familiarize myself with the process first,
14 which is, like, in -- in terms of -- I mean, would you
15 agree that your assignment in this case was to collect
16 some literature, review it and draw some conclusions
17 holistically based on -- on that literature?

18 MR. FOWLER: Object to the colloquy, object to
19 the form.

20 BY THE WITNESS:

21 A. So it's easier to just ask me what -- what
22 I was charged to do, and --

23 BY MR. DAVIS:

24 Q. Sure.

Page 116

1 A. -- than put words in my mouth.

2 I was charged to -- in the area of general
3 causation to examine the literature and try to make a
4 determination whether the exposure to NDMA in the
5 amount and for the duration of time that -- with very
6 generous estimates of what a person could be exposed
7 to was a likely cause of cancer overall or even
8 site-specific cancers, particularly liver cancer.

9 Q. And in -- in doing that, you examined
10 various sources of -- of data, I suppose, we'll call
11 it, right, in the form of -- of studies, a couple of
12 which from Europe you mentioned, correct?

13 A. I examined multiple sources of data and
14 some of them included studies from Europe.

15 Q. Okay. So in -- in doing that task, just
16 kind of put it in -- put the -- put it -- the correct
17 puzzle piece for me, which is what kind of
18 epidemiological study is that that you did?

19 MR. FOWLER: Object to form.

20 BY THE WITNESS:

21 A. First, in this area I didn't do any
22 epidemiological study, so I don't get the question.

23 BY MR. DAVIS:

24 Q. Okay. Well, maybe let's -- let's take it

Page 117

1 this way, which is let me mark a -- an exhibit. This
2 is Exhibit 9 that I'm marking.

3 (WHEREUPON, a certain document was
4 marked Plaintiff-Flack Deposition
5 Exhibit No. 9, for identification, as
6 of 09/28/2021.)

7 BY MR. DAVIS:

8 Q. Do you recognize this as a article that
9 you reference in your bibliography and on which you
10 appear as a coauthor?

11 A. Yes.

12 Q. And it's -- the title is "Individualizing
13 hypertension treatment with impedance cardiography: A
14 meta-analysis of published trials."

15 Do you see that?

16 A. Correct.

17 Q. Okay. Do you recall this particular
18 article that you wrote specifically?

19 A. Yep.

20 Q. Okay. So describe to me what a
21 meta-analysis is?

22 A. So you do individual trials and some of
23 the questions that you want to try to answer often
24 can't be answered in any one trial. So a

<p style="text-align: right;">Page 118</p> <p>1 meta-analysis is a way of combining trials together 2 and reporting them as a single trial, as a single set 3 of data. 4 Q. Would that fall under sort of the broader 5 practice of epidemiological science, a meta-analysis? 6 A. Yeah, a meta-analysis is a form of -- of 7 epidemiology, but this was beyond observational 8 because here you are doing interventions and combining 9 them but clearly they are epidemiological and 10 statistical principles that you have to adhere to. 11 Q. Okay. Let me take you down to the, let's 12 see, this is Page 3 of the article or numbered Page 7. 13 Do you see that? 14 A. Yes. 15 Q. Are -- are you able to read this clearly, 16 Dr. Flack? 17 A. Yep. 18 Q. Okay. So you'll see -- and I'm just 19 trying to walk through the process from start to 20 finish so I can understand kind of exactly what you 21 did here. But you say: "There have been a number of 22 studies demonstrating the ability of ICG-guided 23 therapy." 24 Just briefly, what -- just so we can have</p>	<p style="text-align: right;">Page 120</p> <p>1 Q. Would that have been -- just for 2 clarification, would those -- would those terms have 3 been all applied, like, it had to meet all of those 4 fields or just one of the -- or were those applied in 5 the alternative? 6 A. No, you didn't have to meet all of them. 7 Q. Okay. And then there were some inclusion 8 criteria that you discuss below that, correct? 9 A. Correct. 10 Q. Okay. Were those inclusion criteria 11 preset, meaning that before -- i.e., before you 12 actually applied the -- the keywords into the 13 databases, were the inclusion criteria for those 14 studies preset prior to running the searches? 15 A. I don't remember offhand. Typically you 16 do, but one way or the other you -- you are going to 17 get a lot of studies that pop up and you are going to 18 basically end up taking only the studies that fit -- 19 they are, like, randomized trials, so some of these 20 search terms will show up in studies that are 21 observational studies and they are of no use here. 22 Q. Okay. But you say typically you do set 23 those inclusion criter- -- criteria prior to running 24 the actual search, correct?</p>
<p style="text-align: right;">Page 119</p> <p>1 some context here, what -- what is ICG? 2 A. Impedance cardiography. 3 Q. Okay. 4 And then you say: "We conducted a 5 meta-analysis of trials using ICG in the treatment of 6 adults with" -- "with hypertension." 7 And then you say: "Initially, we 8 conducted a literature and reference search in 9 Medline, PubMed, and Cochrane databases as well as the 10 internet for studies using ICG in the treatment of 11 adults with hypertension." 12 Correct? 13 A. Correct. 14 Q. Is that what would generally be called in 15 this field like a literature review or a literature 16 search? 17 A. When you are looking for trials to 18 include, yes. 19 Q. Okay. And then in those databases you say 20 that you applied keywords of hypertension, resistant 21 hypertension, hemodynamics, impedance cardiography, 22 therapy individualization and goal-directed therapy. 23 Do you see all those -- all those terms? 24 A. Yes.</p>	<p style="text-align: right;">Page 121</p> <p>1 A. You can set them before or afterwards 2 because at the end of the day you are going to apply 3 it to -- to the -- the studies that pop up and -- and 4 all and it's no mortal sin if you don't do it 5 beforehand as long as you have reasonable criteria. 6 Q. Would -- is it -- is it advisable to -- to 7 do it pre running the search to avoid any kind of bias 8 or cherry-picking possibility? 9 MR. FOWLER: Objection to form. 10 BY THE WITNESS: 11 A. Well, first of all, I'm not sure that -- 12 that you are fully grasping what -- what you are 13 asking me. If you apply the -- the -- if you -- if 14 you understand what you want out of -- out of the 15 studies, if you, for example, cherry pick, you are 16 going to get blasted in published literature. So it's 17 really in all likelihood not going to prevent bias 18 in -- in what you include or not. If you have a 19 priori applied criteria for inclusion and those 20 criteria are faulty, when you publish it, you are 21 going to get blasted, and setting it up beforehand 22 doesn't shield you from that. 23 What shields you from that is that you 24 have included studies and there is nobody that's</p>

Page 122

1 saying, Well, you missed this study or you missed that
 2 study, okay, that should have been included. That's
 3 really, as a journal editor, that's what we are -- we
 4 are looking for is were the relevant studies included.
 5 And if you've got a gripe with that, what do you think
 6 was really missed.
 7 BY MR. DAVIS:
 8 Q. Un- -- understood.
 9 I guess related to that, is it important
 10 in doing -- you know, and let's take this ICG study as
 11 an example. Let's say there was an outlier study
 12 that, you know, you -- you disagreed with the results
 13 or they didn't support what the rest of the collected
 14 studies showed in your meta-analysis, is it important
 15 to -- to address that study nonetheless even if you
 16 are discounting it?
 17 A. You don't include or not include studies
 18 based on whether you disagree with the results. You
 19 include studies that fit criteria, like are they
 20 randomized controlled trials, did they report the
 21 outcomes that you are -- you are looking for, and
 22 that's why you included them.
 23 By definition if you do a study enough
 24 times you are going to find disparate results simply

Page 123

1 by chance. And if you do a study where there is
 2 really no real benefit, if you do it enough times, by
 3 chance, you are going to find a -- a statistical
 4 significant result.
 5 So an example, if you go and you are doing
 6 epidemiologic studies and you are looking at 10 and 11
 7 cancer sites and you keep looking at -- at a bunch of
 8 different sites and something pops up positive, weakly
 9 positive, that's -- that's very likely to have been a
 10 type one error or a false positive.
 11 And so you have the same corollary here.
 12 But we don't exclude or exclude studies because we
 13 don't like the results. You include or exclude
 14 studies because they don't fit the criteria that will
 15 allow you to pool them and to make a -- a single
 16 estimate, which by the way when you pool the studies
 17 your estimates are more precise, your 95 percent
 18 confidence intervals are narrower than they ever are
 19 going to be with a single study.
 20 Q. Got it.
 21 Let's -- I'm going to mark your materials
 22 considered, if I haven't done so already. Let me --
 23 yeah. So I'm marking Exhibit B to your report as
 24 Plaintiff-Flack 10.

Page 124

1 (WHEREUPON, a certain document was
 2 marked Plaintiff-Flack Deposition
 3 Exhibit No. 10, for identification,
 4 as of 09/28/2021.)
 5 BY MR. DAVIS:
 6 Q. Let me know when you have that in front of
 7 you, Dr. Flack.
 8 A. It's in front of me.
 9 Q. So you mentioned at the outset that of --
 10 of those documents that are on this list, some were
 11 sent to you by counsel, some you pulled off of other
 12 expert reports, you reviewed the bibliographies of
 13 articles that you read and pulled some off that, and
 14 that you ran in PubMed a search for valsartan and
 15 NDMA.
 16 Does that capture all of the sources of
 17 documents that -- that you collected that made it on
 18 to this Exhibit B?
 19 A. Pretty much.
 20 Q. Okay. So let's just go through so I have
 21 an understanding of -- and I think we can make this a
 22 relatively quick exercise where I don't go through
 23 each and every document, but I want to get a general
 24 sense of how this stuff arrived in your hands.

Page 125

1 So --
 2 MR. FOWLER: Objection.
 3 BY MR. DAVIS:
 4 Q. -- let's start with MDL Pleadings and
 5 General Documents.
 6 Was that provided to you by counsel?
 7 A. Anything that's related to the case like
 8 that was sent to me by counsel. So let me make it
 9 easy for you, that counsel sent me stuff, sent me
 10 articles and all, but if you want to go through the
 11 list, I'll be happy to do it with you.
 12 Q. Sure, and let's just make it quick. So --
 13 so MDL Pleadings and General Documents, Written
 14 Discovery, provided to you by counsel?
 15 A. Correct.
 16 Q. Okay. Deposition Transcripts and Exhibits
 17 provided to you by counsel?
 18 A. Where else would they come from? Of
 19 course.
 20 Q. Okay. Is there a reason that you only
 21 reviewed Teva deposition transcripts and exhibits?
 22 A. I reviewed what I felt was relevant to the
 23 case. I reviewed expert testimony coming from people,
 24 that -- that are not on the defendant side, and so

<p style="text-align: right;">Page 126</p> <p>1 that characterization that I only saw things from the 2 defendant side is -- is inaccurate. 3 Q. Well, let's start with -- with the first 4 point, which is it's your testimony, correct, and 5 sorry if I'm making you repeat this, but that the 6 deposition transcripts and exhibits that were provided 7 to you came to you from counsel? 8 A. There is no other source. Yes, they came 9 from counsel. 10 Q. Did -- did you ask counsel why they were 11 only providing you Teva depositions and exhibits as 12 opposed to depositions and exhibits used at those 13 depositions for the other manufacturers in this case? 14 MR. FOWLER: Objection; form, lacks foundation. 15 BY THE WITNESS: 16 A. Did I ask him that question, no. 17 BY MR. DAVIS: 18 Q. Did you make any inquiry at all about why 19 you were only provided Teva depositions and exhibits 20 to those depositions? 21 A. No, what -- 22 MR. FOWLER: Objection; foundation. 23 BY THE WITNESS: 24 A. No, what I did was I tried to make sure</p>	<p style="text-align: right;">Page 128</p> <p>1 documents as opposed to documents that included those 2 of the other manufacturers? 3 MR. FOWLER: Objection; form, asked and 4 answered, lacks foundation. 5 BY THE WITNESS: 6 A. Many of the documents I received had 7 nothing to do or minimal to do with the question that 8 I was asked to address. They weren't relevant. And 9 that's why I stated multiple times that I did not use 10 any conclusions anywhere else to draw my own 11 conclusions in this case and in my opinion. 12 BY MR. DAVIS: 13 Q. Okay. How about on Page 4, the Publicly 14 Available FDA Documents, were those provided to you by 15 counsel or did you pull those yourself? 16 A. They were provided by counsel, some of the 17 FDA documents I pulled. 18 Q. Okay. And then going from Page 4 through 19 the very top of Page 12 there is quite a few 20 literature sites. Would those -- you -- I think your 21 testimony previously was that you may have received 22 those documents from a myriad of sources? 23 A. That's correct. 24 Q. Is that correct? Okay.</p>
<p style="text-align: right;">Page 127</p> <p>1 that I had the relevant studies and I have stated 2 repeatedly that I did not rely on anybody else's 3 expert testimony to generate my conclusions. So if 4 you extend that is -- those documents are largely 5 irrelevant to me. I may review them, I may get them 6 sent to me, I may not review them. Everything that's 7 sent to me I did not sit and -- and dive to in depth. 8 BY MR. DAVIS: 9 Q. Okay. Same thing for the other expert 10 reports that you have -- have listed for, I guess, 11 Plaintiff Expert Reports with Exhibits provided to you 12 by counsel? 13 A. Some of them I scanned, some of them I may 14 have read, some of them I didn't pay any attention to. 15 Q. Okay. Teva Documents provided to you by 16 counsel, below that, on Page 3? 17 A. What's your question? 18 Q. Was it -- were the Teva Documents listed 19 on Page 3 and 4 under that header, those were provided 20 to you by counsel? 21 A. That's why they are on the list, yes. 22 Q. Okay. And same question with the 23 Deposition Exhibits and Transcripts, did you make any 24 inquiry as to why you were only provided with Teva</p>	<p style="text-align: right;">Page 129</p> <p>1 Sitting here today, are you able to go 2 through and tell me which ones you received from 3 counsel versus on your own versus some other source? 4 A. No. 5 Q. Okay. What about the Post-Marketing 6 Periodic Safety Reports on Pages 12, 13, how did those 7 arrive in -- to be -- to -- how did those come to be 8 on this exhibit to your report of materials 9 considered? 10 A. Well, they were materials sent to me, 11 that's a difference between materials sent to me and 12 materials considered. So they sent these materials 13 for me and these came from counsel. That -- that 14 actually does not mean that they were considered. 15 Q. Gotcha. Okay. 16 Is that the same answer with regard to the 17 Bellwether Plaintiff documents from Page 13 to 20, the 18 last page? 19 A. My response to you is going to be 20 essentially the same on these documents, yes, so the 21 answer is yes. 22 Q. Okay. Okay. Look at the Miscellaneous 23 section on Page 20. 24 The very last item says: "This list</p>

<p style="text-align: right;">Page 130</p> <p>1 includes items Plaintiffs' experts relied on. By 2 doing so, Defendants and this expert are not waiving 3 any arguments or objections related to admissibility." 4 Do you see that? 5 A. On what page? 6 I don't know. That's lawyer's speak. 7 You've got to translate for me. 8 Q. Well, that was -- that was my question is 9 that strikes me as legalese. 10 Did you write that or did counsel write 11 that? 12 A. I think my response will tell you I didn't 13 write that. 14 Q. Okay. Thank you. 15 MR. DAVIS: All right. This is a good breaking 16 point in my outline and, in fact, one of my headphones 17 just went out, so can we take our lunch break, if 18 that's okay with you guys? 19 MR. FOWLER: Sure, Counsel. 20 MR. DAVIS: Okay. All right. Thank you. Do 21 you want to -- when -- 45 minutes okay? 22 Let's go off the record first. 23 THE VIDEOGRAPHER: The time is 11:57 a.m., off 24 the record.</p>	<p style="text-align: right;">Page 132</p> <p>1 that paragraph: "...it is my opinion that there is 2 insufficient scientific evidence to establish that 3 trace amounts of NDMA or NDEA in valsartan caused the 4 types of cancers Plaintiffs allege in this 5 litigation." 6 Do you see that? 7 A. Yes. 8 Q. Is -- is that your word that you are using 9 there, "trace," that word "trace," is that your word 10 or did you borrow that from someone? 11 A. I think my command of the English language 12 is fairly pretty good, and if you are insinuating that 13 for some reason that I wouldn't be able to phrase how 14 the NDMA would be in valsartan in multiple ways, you 15 are again barking up the wrong tree. This is my 16 report, it has got my name on it, and, again, I hope 17 you've got more than this. 18 Q. Well, Doctor, I'm -- I'm asking because 19 I've seen that word appear in a number of manufacturer 20 communications. I'm asking if -- if it's your opinion 21 that, indeed, the amounts of NDMA and NDEA in 22 valsartan are trace amounts or is there -- 23 MR. FOWLER: Objection to -- objection to the 24 colloquy.</p>
<p style="text-align: right;">Page 131</p> <p>1 (WHEREUPON, a recess was had 2 from 11:47 to 12:53 p.m.) 3 THE VIDEOGRAPHER: The time is 12:53 p.m. -- 4 1:53 p.m. (sic), we are on the record. 5 MR. DAVIS: I'm sorry. I didn't -- I didn't 6 hear that. Are we back on the record now? 7 THE VIDEOGRAPHER: Yes. 8 MR. DAVIS: Okay. Thank you. Sorry, you -- you 9 are cutting in and out a little bit. 10 THE VIDEOGRAPHER: I apologize. 11 MR. DAVIS: Yeah. Not -- not a problem. 12 BY MR. DAVIS: 13 Q. Okay. Doctor, we had left off going 14 through your materials considered list, the Exhibit B 15 to your report which is -- which was marked as 16 Exhibit 9 (sic). Let me ask a question. 17 Did you look at any test results showing 18 NDMA, NDEA content in any of the valsartan drugs at 19 issue in this litigation? 20 A. Not in any detail. I did not pay much 21 attention to that. 22 Q. Okay. Let me have you turn, if you would, 23 to Page 31 of your report, which is Section VIII. 24 You write starting in the second line of</p>	<p style="text-align: right;">Page 133</p> <p>1 Go ahead, Doctor. 2 BY THE WITNESS: 3 A. I have already taken ownership of the 4 word. I can't help it that it was somewhere else, and 5 I'm sure through throughout my report there are 6 probably words that somebody else has used somewhere 7 that I use, but there are a variety of ways that you 8 can express this, and I expressed it in a way that is 9 accurate, and there is -- there is probably more than 10 one way that you can say it. 11 BY MR. DAVIS: 12 Q. But it is your testimony you didn't 13 actually review any of the act- -- the test results 14 for NDMA, NDEA content in valsartan, correct? 15 MR. FOWLER: Objection; mischaracterizes. 16 BY THE WITNESS: 17 A. Both -- both of the agencies that regulate 18 drugs in the US and in Europe have posted what the top 19 amounts of NDMA were in -- in pills. So you don't 20 have to review granular all of the test results coming 21 from the companies when the regulatory agencies have 22 already done it. 23 BY MR. DAVIS: 24 Q. Well, how -- how can you be positive</p>

Page 134

1 without having compared the internal test results to
 2 the FDA published test results that those are, in
 3 fact, the maximum amounts?
 4 A. Because the same reason that I trust the
 5 FDA when they make decisions and the same reason you
 6 trust them when they make decisions that they've done
 7 their homework. You know, I've actually worked with
 8 the FDA as a member of cardiorenal. They are pretty
 9 smart people and they're very talented. So when they
 10 and the Europeans post what the top levels of NDMA are
 11 in pills and I actually in my simulation used a level
 12 even higher than that, I think that that's very
 13 commendable.
 14 Q. And you trust the manufacturers to have
 15 provided complete information to the FDA regarding
 16 their maximum test levels?
 17 A. I trust the FDA to get to -- to the bottom
 18 of this because the FDA basically is commissioning the
 19 testing and so, yes, I trust the FDA and the European
 20 society to get to the bottom of this and to understand
 21 this problem.
 22 Q. Okay. Well, while -- while we're talking
 23 about the FDA, is it -- so it's your opinion that the
 24 word "trace" can mean amounts far in excess of what

Page 135

1 the FDA has said as the interim acceptable limits?
 2 MR. FOWLER: Objection; form.
 3 BY THE WITNESS:
 4 A. So if I use the word "trace" and the
 5 amount is above that, then by implication what you
 6 said is -- is true.
 7 BY MR. DAVIS:
 8 Q. Explain to me your reasoning there?
 9 A. I've already explained it to you. Do you
 10 want me to explain it to you again, because I'm going
 11 to give you exactly the same answer?
 12 Q. Sure, why not.
 13 A. So if the FDA says there is a certain
 14 amount in there, the amount in the NDMA pills, at
 15 least that some of them is above that, and I'm aware
 16 of that and I use the word "trace," then it is
 17 unambiguous that I consider it trace.
 18 Q. Okay. Even if the levels are hundreds of
 19 times in excess of the FDA's interim limits --
 20 MR. FOWLER: Objection.
 21 BY MR. DAVIS:
 22 Q. -- that's trace in your opinion?
 23 MR. FOWLER: Objection; form, facts not in
 24 evidence.

Page 136

1 BY THE WITNESS:
 2 A. Maybe you can give me a definition of what
 3 trace and non-trace is, but any definition is going to
 4 be arbitrary, and I applied the terminology that I
 5 felt was most appropriate and reasonable.
 6 BY MR. DAVIS:
 7 Q. You never reviewed any Mylan-produced
 8 documents in preparing your report, did you?
 9 MR. FOWLER: Objection; form, lacks foundation.
 10 BY THE WITNESS:
 11 A. Is it on my list?
 12 BY MR. DAVIS:
 13 Q. It's not.
 14 A. Okay.
 15 MR. FOWLER: Objection.
 16 BY THE WITNESS:
 17 A. If it's not on my list, then I never got
 18 it and -- and all, and it is not an area that I needed
 19 to review.
 20 BY MR. DAVIS:
 21 Q. Okay. So you wouldn't be for -- aware,
 22 for example, that Mylan's own pharmacology/toxicology
 23 employees internally were objecting to Mylan's use of
 24 the word "trace" to describe their NDMA levels?

Page 137

1 MR. FOWLER: Objection; form, facts not in
 2 evidence.
 3 BY THE WITNESS:
 4 A. So if I don't have any documents from
 5 Mylan and I've never communicated with Mylan, the
 6 answer is pretty obvious. I -- I would not know that.
 7 And whether I call it a trace or an impurity or -- or
 8 whatever didn't in -- influence my conclusion.
 9 BY MR. DAVIS:
 10 Q. Okay. You didn't review either any FDA or
 11 any health authority guidances on the assessment and
 12 control of genotoxic or mutagenic compounds, did you?
 13 MR. FOWLER: Objection; form, mischaracterizes.
 14 BY THE WITNESS:
 15 A. I've read material that talked about those
 16 things, but that's -- that's not my area of expertise,
 17 and it's not something that I'm dwelling on.
 18 BY MR. DAVIS:
 19 Q. So you would not have reviewed the M7(R1)
 20 FDA guidance on Assessment and Control of DNA Reactive
 21 (Mutagenic) Impurities in Pharmaceuticals to Limit
 22 Potential Carcinogenic Risk?
 23 MR. FOWLER: Objection; form, mischaracterizes.
 24 BY THE WITNESS:

Page 138

1 A. I don't remember a specific document.
2 I've read stuff by the FDA, but I don't remember a
3 specific document.
4 BY MR. DAVIS:
5 Q. Okay. It's not in your -- would you agree
6 with me that it's not in Exhibit 10, which is your
7 list of materials considered under publicly available
8 FDA dot -- documents?
9 MR. FOWLER: Objection; form.
10 BY THE WITNESS:
11 A. I'll take your word for it.
12 BY MR. DAVIS:
13 Q. Okay. So you wouldn't be aware, for
14 example, that the FDA in that document stated that
15 N-nitroso compounds can display extremely high
16 carcinogenic potency?
17 MR. FOWLER: Objection to the form.
18 BY THE WITNESS:
19 A. So the -- the ability of these compounds
20 even in experimental animal models to cause cancer,
21 particularly liver cancer, is not related to are you
22 exposed or are you not. It is done in experiments
23 that have a certain microgram-to-kilogram per day
24 exposure. And so to simply characterize that as,

Page 139

1 Well, it can, there are certain layers beneath that
2 including the amount, and if you are trying to
3 extrapolate animals to humans, it's an amount per
4 kilogram of body weight which is in -- in my report.
5 And so it's not as simple as -- as you put it out
6 there. And humans, really, through the valsartan
7 exposure to NDMA have come nowhere close to what
8 animals have where you start seeing cancers.
9 BY MR. DAVIS:
10 Q. Well, thank you for that, Doctor, but
11 my -- my question was quite simple. It was whether
12 you were aware that the FDA had said that N-nitroso
13 compounds can display extremely high carcinogenic
14 potency in that document.
15 Is the answer yes or no?
16 MR. FOWLER: Objection; form, hearsay.
17 BY THE WITNESS:
18 A. Well -- well, one, I'm not going to answer
19 it yes or no because it is not a yes-or-no question
20 that you are trying to box me into. Even if you use
21 animal models, there is a certain amount of exposure
22 that you have to have to develop cancer. So in animal
23 models, and you are trying to extrapolate that in
24 humans, the animals are getting a lot more of exposure

Page 140

1 on a microgram-per-kilogram body weight than humans
2 ever have from valsartan that had NDMA in it.
3 MR. DAVIS: I'm going to object and move to
4 strike as nonresponsive.
5 BY MR. DAVIS:
6 Q. The answer was whether you were aware of
7 that statement by the FDA, and that's very simply a
8 yes-or-no question, Doctor.
9 Can you answer it?
10 MR. FOWLER: Objection. Objection. Objection
11 to the colloquy. Objection to counsel's moving to
12 strike in violation of the court's order in this case
13 not to make such statements. So objection noted.
14 Doctor, go ahead.
15 BY THE WITNESS:
16 A. I understand why you want to -- want to
17 strike it because it gets to the heart of the matter
18 and -- and all the heart of the matter is a statement
19 by the FDA, and the FDA has made a -- a whole host of
20 statements about a variety of things. They've also
21 made statements about the excess cancer risk of what
22 they understand the exposure is, okay. And -- and
23 also we could talk about that as well.
24 BY MR. DAVIS:

Page 141

1 Q. Well, I'm -- and you just said that you
2 trusted the FDA.
3 So do you trust the FDA's statements then
4 that N-nitro compounds can display extremely high
5 carcinogenic potency?
6 MR. FOWLER: Objection; form, asked and
7 answered.
8 BY THE WITNESS:
9 A. I think what the animal studies would tell
10 you is that under certain conditions at certain
11 exposures that you can induce tumors with these
12 compounds.
13 MR. DAVIS: Counsel, I'm entitled to an answer
14 to my question. The answer is whether he is aware
15 that the FDA has made that pronouncement, and I'm
16 entitled to a simple yes-or-no answer.
17 BY MR. DAVIS:
18 Q. So I'm going to ask it one more time, can
19 I -- can I get a yes-or-no answer, are you aware that
20 the FDA has made that statement?
21 MR. FOWLER: Objection to the colloquy. You've
22 changed your question from are you aware to do you --
23 do you accept that. And I object to the colloquy,
24 Counsel.

<p style="text-align: right;">Page 142</p> <p>1 BY THE WITNESS:</p> <p>2 A. Well, you are entitled to an answer, but</p> <p>3 you can't really tell me that I've got to answer it</p> <p>4 yes or no and it is not a yes-or-no question because</p> <p>5 if you are asking can it cause cancer, there are</p> <p>6 conditions under which it can and conditions under</p> <p>7 which it probably doesn't.</p> <p>8 BY MR. DAVIS:</p> <p>9 Q. Can I get a yes-or-no answer, Doctor, to</p> <p>10 whether you're aware of whether the FDA has stated</p> <p>11 that N-nitroso compounds can display extremely high</p> <p>12 carcinogenic potency, yes or no?</p> <p>13 MR. FOWLER: Objection to form.</p> <p>14 BY THE WITNESS:</p> <p>15 A. Do you want me to repeat my answer?</p> <p>16 BY MR. DAVIS:</p> <p>17 Q. If it is a yes or no, then -- then, yes,</p> <p>18 I'd like you to repeat it?</p> <p>19 A. You can't compel me to answer a question</p> <p>20 yes or no when it is not a yes-or-no question. You</p> <p>21 don't have that right.</p> <p>22 Q. You are either aware of the statement or</p> <p>23 you are not, Doctor.</p> <p>24 Are you aware of the statement from the</p>	<p style="text-align: right;">Page 144</p> <p>1 MR. FOWLER: Objection; form, mischaracterizing.</p> <p>2 BY THE WITNESS:</p> <p>3 A. What I know is that they are listed as</p> <p>4 probable carcinogens, okay. They are not listed as</p> <p>5 definitive carcinogens. And whether they are</p> <p>6 carcinogenic or not depends on a number of things,</p> <p>7 including the dose, duration of exposure, and -- and</p> <p>8 all, and you can't really just talk about it, like,</p> <p>9 Well, it is biologically plausible, therefore, which</p> <p>10 is what you are trying to do.</p> <p>11 BY MR. DAVIS:</p> <p>12 Q. So you are aware that, then, it sounds</p> <p>13 like that the IARC, the World Health Organization and</p> <p>14 the EPA have all listed NDMA and NDEA as probable</p> <p>15 human carcinogens?</p> <p>16 A. I don't know, that's pretty much what I</p> <p>17 just said.</p> <p>18 Q. Sure. And sometimes I'm going to ask very</p> <p>19 basic questions, but it's -- you know, this is part of</p> <p>20 the yeoman's work of doing this.</p> <p>21 MR. FOWLER: Object to the colloquy.</p> <p>22 BY MR. DAVIS:</p> <p>23 Q. Turning to Page 31, back to Page 31 of</p> <p>24 your report, you say that you've:</p>
<p style="text-align: right;">Page 143</p> <p>1 FDA or are you not aware of it?</p> <p>2 MR. FOWLER: Same objection.</p> <p>3 BY THE WITNESS:</p> <p>4 A. I am aware, whether the FDA said it or</p> <p>5 not, that under the right conditions of exposure,</p> <p>6 which have not been met in human studies, that you can</p> <p>7 see cancers in animals and predominantly liver cancer.</p> <p>8 Okay. So will I trust the FDA? Absolutely. And if</p> <p>9 they weren't concerned, they wouldn't have been</p> <p>10 concerned about this.</p> <p>11 BY MR. DAVIS:</p> <p>12 Q. Do you agree that NDMA and NDEA are</p> <p>13 potential human carcinogens?</p> <p>14 A. What I know about NDMA and NDEA is that in</p> <p>15 animals at a certain level of exposure they can cause</p> <p>16 tumors. Okay.</p> <p>17 In humans we are still really waiting on</p> <p>18 unconfounded data, but surely if you see something in</p> <p>19 animals that makes you cautious in -- in humans, but</p> <p>20 we don't have definitive data, certainly not through</p> <p>21 the valsartan route, that it is causing cancer.</p> <p>22 Q. So it is your testimony then that you</p> <p>23 agree that it's -- there is a potential for NDMA and</p> <p>24 NDEA to be human carcinogens?</p>	<p style="text-align: right;">Page 145</p> <p>1 "...conducted a thorough review of the</p> <p>2 relevant literature on valsartan use and cancer</p> <p>3 incidence, including the literature cited by</p> <p>4 plaintiffs' experts in this litigation, and the</p> <p>5 literature simply does not support a causal</p> <p>6 association between exposure to trace amounts of</p> <p>7 nitrosamines and valsartan and cancer development. I</p> <p>8 will discuss my assessment of the key literature on</p> <p>9 this subject in turn."</p> <p>10 Did I read your report correctly there?</p> <p>11 A. It is on the paper. You read it</p> <p>12 correctly.</p> <p>13 Q. Okay. The -- and then what follows in</p> <p>14 your report, I'm just trying to get an understanding</p> <p>15 of the overall structure, is you have a section on</p> <p>16 animal studies, a section on occupational studies, and</p> <p>17 then you have a section on the valsartan studies, is</p> <p>18 that correct?</p> <p>19 A. That would be correct.</p> <p>20 Q. Okay. And is it your opinion that you've</p> <p>21 adequately discussed the key literature as you</p> <p>22 identified it on Page 31 of your report?</p> <p>23 A. Unless --</p> <p>24 MR. FOWLER: Objection to form.</p>

Page 146

1 BY THE WITNESS:
2 A. -- unless you can prove otherwise or I can
3 uncover something that I missed on my own, then the
4 answer to that is yes.
5 BY MR. DAVIS:
6 Q. Are you expressing any kind of opinion in
7 your report that the FDA's interim intake limits for
8 NDMA or NDEA are unreasonable?
9 A. First, I'm not expressing any opinion on
10 whether their limits are -- are reasonable or
11 unreasonable because they themselves have questions
12 about this and there is an uncertainty. So the limits
13 are -- are where they are and -- and all, but I'm not
14 expressing any -- any opinion -- real opinion on that.
15 Q. On Page 39 of your report you have a
16 conclusion paragraph there at the end of Section VIII
17 that starts with "Thus."
18 Do you see that?
19 A. I see it.
20 Q. "Thus, the available medical and
21 scientific literature, including the animal studies on
22 NDMA/NDEA exposure and occupational exposure studies,
23 and publications examining the effect of NDMA/NDEA in
24 valsartan, does not establish that trace amounts of

Page 147

1 NDMA or NDEA in car" -- "in valsartan cause an
2 independent or increased risk of cancer."
3 Do you see that?
4 A. I see it.
5 Q. Is it fair to characterize that paragraph
6 as your conclusion regarding the exercise you went
7 through in Section VIII of your report?
8 MR. FOWLER: Objection to the form.
9 BY THE WITNESS:
10 A. I think it is pretty obvious that that's
11 the case.
12 Q. Okay. And that conclusion, as you say, is
13 based on the available medical and scientific
14 literature, is that right?
15 A. Is there anything else? I mean, I am all
16 ears if I've missed something. So is there anything
17 else I should be considering?
18 Q. Well, I'll -- I'll admit, Doctor, I'm not
19 the expert, so --
20 A. Well, that's clear.
21 Q. Thank you.
22 A. That's clear.
23 Q. How can you be sure that you didn't miss
24 some study?

Page 148

1 MR. FOWLER: Objection to form.
2 BY THE WITNESS:
3 A. So -- so usually when there is an issue
4 you've missed something that is -- is crucially
5 important, it gets pointed out to you what -- what you
6 missed. And barring that or barring my discovery of
7 that, my conclusion is, is that of the studies that I
8 deemed relevant to really come to the conclusions that
9 I did, I -- I have included them to the best of my
10 ability.
11 BY MR. DAVIS:
12 Q. Okay. Let's turn to Section III.O of your
13 report, which is titled "Epidemiology of Hypertension
14 and Cancer."
15 I guess my first question is: Are you
16 attempting to posit in this section of your report
17 what hypertension is a cause of cancer?
18 A. First of all, epidemiology doesn't prove,
19 and even the biologic plausibility of hypertension per
20 se causing cancer, it's one of the things that is
21 potentially explaining the association, but it's
22 really not at the top of the list.
23 Shared risk factors are really a -- a very
24 fertile ground and really are more proximal than that,

Page 149

1 but you do -- you do see risk, increased risk of
2 cancer, in some cancers you see decreased risk, but
3 you see it both in medicated and unmedicated
4 hypertension.
5 So it is clearly not all -- all drug
6 exposure. And even when you can link drug exposures
7 at times is because of drugs being used that are more
8 likely to be used by people who have these risk
9 factors that it doesn't mean the drugs per se are
10 causal and it doesn't necessarily say that they are
11 not causal. You are -- you are sort of -- you
12 don't -- you don't really know and -- and all. So I'm
13 saying far beyond that, if you go toward the end of
14 this, you'll see five or six or more explanations of
15 why you might see an epidemiologic association between
16 hypertension and cancer.
17 Q. If you turn to Page 25 of your report, you
18 call out kidney cancer specifically.
19 Is -- is it, in your opinion, that the
20 strongest association between kidney cancer and
21 hypertension or -- why did you call that one out in
22 particular?
23 MR. FOWLER: Objection to form.
24 BY THE WITNESS:

Page 150

1 A. So the -- the answer to why that one was
 2 called out is really the first part of that sentence.
 3 It is that the blood pressure level has been linked to
 4 an increased risk of cancer in people with kidney
 5 cancer. And all cancers you can't say that for,
 6 kidney cancer you can. And right now it is an
 7 unexplained explanation -- it is an unexplained
 8 observation that -- that has been made that we don't
 9 really know exactly what it means.
 10 BY MR. DAVIS:
 11 Q. Okay. Well, based on the -- you cite a
 12 number of articles, and I've -- I've reviewed some of
 13 them.
 14 My question is: Based on your review of
 15 the literature, is the association strongest between
 16 kidney cancer and hypertension or is there some other
 17 cancer that you think has a stronger association?
 18 A. So when you are doing epidemiology, and
 19 this is one of the tough things about doing
 20 epidemiology, and you go into the hypertensive
 21 population, it is not -- very few of them are pure
 22 hypertensives. You have hypertensives who are
 23 overweight. You have hypertensives who are overweight
 24 and don't exercise much. You have hypertensives who

Page 151

1 are taking medicines, not taking medicines. You have
 2 hypertensive patients who have diabetes. And a lot of
 3 these factors are linked to cancer.
 4 So high -- hypertension is -- it's
 5 relationship to cancer at least is partially explained
 6 by comorbidities. It is not fully understood and
 7 clearly why it's related to blood pressure level,
 8 biologically everything at this juncture is -- is
 9 speculation, but what is not in doubt is that a group
 10 of hypertensive patients who have your usual
 11 comorbidities have a heightened risk for cancer.
 12 Q. Let me ask you a question based on your
 13 experience as a -- as a treating physician.
 14 When -- when you are treating hypertensive
 15 patients, do you often order urinalysis for them?
 16 A. So the answer to that question is actually
 17 earlier in my report, and when we talk about the usual
 18 workup, urinalysis is part of the initial workup
 19 that's listed in my report.
 20 Q. So is that -- are you telling me that's
 21 something you would typically do as part of a standard
 22 regimen of -- of treating your patients?
 23 MR. FOWLER: Objection; form.
 24 BY THE WITNESS:

Page 152

1 A. I just answered that. The answer is yes.
 2 BY MR. DAVIS:
 3 Q. What's -- what's the reason for ordering
 4 urinalysis for your hypertensive patients?
 5 A. So the rationale for ordering a urinalysis
 6 is, one, you are going to get an estimate of dipstick
 7 proteinuria; two, you are going to get a look at the
 8 urine sediment and whether they are casts or red cells
 9 or red cell casts which can indicate glomerular
 10 disease or other problems in the kidney; three, you
 11 are also going to get look at specific gravity, which
 12 is an important factor in the kidney's ability to
 13 concentrate urine.
 14 So -- so there are multiple parameters
 15 that you are looking for, things you are looking for
 16 when you order a urinalysis.
 17 Q. And you mentioned the presence of red
 18 blood cells, did you not, as -- as one reason?
 19 A. Yes.
 20 Q. Okay. And could the presence of red blood
 21 cells in the urine be an indicator potentially of
 22 kidney cancer?
 23 A. The presence of red blood cells in the
 24 urine is most likely not kidney cancer. It could be

Page 153

1 anywhere from the kidney to the ureters to the bladder
 2 to the urethra. You don't really know. But you do
 3 know that red cells in the urine are not normal. And
 4 so it doesn't tell you anything specific, but it tells
 5 you there is a potential problem that needs
 6 evaluation.
 7 Q. Okay. And what -- what further evaluation
 8 or procedures would you recommend for a patient where
 9 you saw red blood cells in the urine like that?
 10 A. You may do a cystoscopy, you may do a
 11 prostate massage and try to ensure there is no
 12 infection based on their response to the prostate
 13 massage as well as anything that comes out of the
 14 urethra in response to that, you may do a CAT scan or
 15 an MRI looking for basically masses in the kidney,
 16 stones in the kidney.
 17 So there are a range of things pro- -- in
 18 the urinary tract that can cause red cells to be there
 19 and just seeing red cells per se doesn't tell you even
 20 remotely what it is, what it is from.
 21 Q. Sure.
 22 And you mentioned masses in the kidneys as
 23 a result of doing, like, a CT scan or an ultrasound.
 24 When you say "masses," are you referring potentially

Page 154

1 for -- looking for tumors?

2 A. So you have tumors and many of the masses

3 you'll find in the kidney are -- are benign, some of

4 them are not benign and are malignant. Certainly

5 malignancy is a potential problem that -- that you

6 are -- you are concerned about, but it is also a menu

7 of problems that you are concerned about of which

8 malignancy is one.

9 Q. So would you agree with me that in doing

10 that urinalysis, you might be led on the investigative

11 trail as a physician to an eventual discovery of -- of

12 cancer in some cases if you see red blood cells in the

13 urine, then take a CT ultrasound, find a mass, and

14 then discover that that mass is a malignant tumor?

15 A. What I would -- would say about the --

16 this is that in the relative sense malignancy will be

17 one of the lower probability explanations or findings

18 of a workup. It is on the list, it does occur, but in

19 a clinical practice most of the people with red cells

20 in their urine are not going to have cancer.

21 Q. Is -- is endometrial cancer on the list as

22 well for red blood cells in the urine?

23 A. Well, in women you can bleed out of the

24 endometrium and it can contaminate the urine, so

Page 155

1 absolutely.

2 Q. Could those examples be examples of what's

3 called detection bias?

4 A. Well, detection bias, my understanding of

5 it, detection bias is that you've got people under

6 surveillance, they are coming in and out of the

7 healthcare system, and they are getting not only

8 routine tests but sometimes symptom directed tests and

9 just by the fact that they are -- they are there, if

10 you take 100 people who are in the system on a regular

11 basis and 100 people that are in the system less

12 intensely or not in the system, you are obviously

13 going to find more in the people who are in the

14 system. It doesn't mean they have more disease than

15 the people who are not in the system, but you have the

16 bias in that you can detect it because they are under

17 surveillance.

18 Q. Would you agree that hypertension patients

19 tend to be under a greater degree of medical

20 surveillance than your average population?

21 MR. FOWLER: Objection; form.

22 BY THE WITNESS:

23 A. Actually, I'm not sure that I -- I know

24 that -- that in -- in any direct comparison. You have

Page 156

1 to realize that a number of hypertensive, it is a very

2 heterogenous population. You have hypertensive

3 patients that are diagnosed, started on medicine, they

4 never follow up, they never come back. You get

5 hypertensive patients who are under care, keep all of

6 their -- their appointments. And you have

7 hypertensive patients who drift in and -- and out of

8 care. You also have to realize that in the general

9 population, even non-hypertensives, many of them are

10 actually in the system of care for other reasons. And

11 so, again, it is just kind of heterogenous on both

12 sides that you have people in and out of the system,

13 but if you are hypertensive and you are adherent to

14 and getting good follow-up from your doc or doctors,

15 you should be in the system more, you should be under

16 surveillance more.

17 BY MR. DAVIS:

18 Q. Okay. You cite the -- and forgive me if

19 I'm pronouncing this wrong, the Seretis article

20 several times in your report?

21 A. About what?

22 Q. Are you -- are you familiar with that

23 article?

24 A. Why don't you pull up what you are talking

Page 157

1 about.

2 Q. Sure. If you look at your report, you

3 cite Seretis at the end of Footnote 23, at the end of

4 Footnote 24, again at Footnote 31c, as an example?

5 A. Yep.

6 Q. Okay.

7 A. What questions can I answer on that?

8 Q. Sure. Let me introduce it as an exhibit.

9 This is Flack 11.

10 (WHEREUPON, a certain document was

11 marked Plaintiff-Flack Deposition

12 Exhibit No. 11, for identification,

13 as of 09/28/2021.)

14 MR. FOWLER: Counsel, I am putting the article

15 in front of the witness.

16 MR. DAVIS: Okay. Thank you.

17 BY MR. DAVIS:

18 Q. I'd like you to go, if you would, Doctor,

19 to the very last page prior to the references, which

20 is Page 7.

21 A. All right.

22 Q. The authors are discussing there this

23 detection bias phenomenon and they say:

24 "Third, detection bias may also account

<p style="text-align: right;">Page 158</p> <p>1 for some of the reported associations as individuals 2 treated for hypertension are under closer medical 3 surveillance that may lead to easier detection of 4 cancer compared to untreated persons." 5 Do you see that? 6 A. I see that. 7 Q. Is there anything about that statement 8 that you -- you disagree with? 9 A. What I would say is pretty much what I 10 said previously, if you were hypertensive and if you 11 follow up, you are in the system and there is a 12 greater risk for -- greater probability of detection, 13 but it depends on who you are being compared to 14 because there are plenty of people who are not 15 hypertensive who are in the medical system for other 16 reasons who also had a similar kind of ability to have 17 an increased probability of detection. 18 Here they make a statement and there is no 19 specific reference attached to it. And I'm surprised 20 that as focused you are on references that you would 21 just take the author's word for this. 22 Q. I'm sorry. I didn't catch that last 23 sentence. What was that? 24 A. I just -- I was surprised, as focused as</p>	<p style="text-align: right;">Page 160</p> <p>1 data. 2 Q. Okay. Specifically relating to 3 hypertension and cancer? 4 A. Specifically related to what's in that -- 5 in that -- in that sentence, and -- and that's really 6 true literally whether you are hypertensive or not 7 when you are looking at epidemiological studies. 8 There is nothing unique about hypertension here. 9 Q. Okay. Do you interpret the authors of 10 this article as discussing specifically the available 11 meta-analyses for -- and which examined hypertension 12 and cancer? 13 A. I think these authors did what as a 14 journal editor, associate journal editor I would 15 expect when I am reviewing papers giving authors 16 feedback and at times pushing them then, is that when 17 you write a paper, you -- you basically ex-train -- 18 explain the strengths and potential weaknesses. Okay. 19 And it doesn't mean that everything that is discussed 20 on either side is -- is of equal weight, but you 21 really need to provide the perspectives for a reader 22 who is not steeped in methodology to be able to have 23 some context on what they are reading. 24 And so when they discuss the strengths and</p>
<p style="text-align: right;">Page 159</p> <p>1 you are on references, that you would not -- you would 2 take the author's word for this because there is 3 absolutely no reference here, it is just a general 4 statement with no foundation other than speculation. 5 Q. Well, that's why I'm asking your -- your 6 opinion, Doctor. 7 Is -- is there anything about that 8 statement that you disagree with? 9 A. The statement is qualified and -- and all 10 and without a hard reference to that, I would say that 11 it may not be true. 12 Q. The -- the very last sentence in the next 13 paragraph says: 14 "However, careful interpretation is 15 required as most meta-analyses included a relatively 16 small number of studies, several relative risks had 17 weak or moderate magnitude and may be affected by a 18 residual confounding." 19 Did I read that correctly? 20 A. Yes, you did. 21 Q. Is there anything about that statement 22 that you disagree with? 23 A. It is a fairly accurate description of 24 epidemiologic data and what you get in epidemiologic</p>	<p style="text-align: right;">Page 161</p> <p>1 the potential weaknesses, some of the weaknesses that 2 they discussed, and even some of the strengths they 3 discussed, might not necessarily be something that has 4 been studied and you are absolutely definitive of, but 5 you are saying that it's certainly -- this could be 6 part of the explanation of why you are seeing it line 7 up more on the positive side or -- or the negative 8 side and to be considered. And I think that they did 9 a very reasonable job in -- in doing that in this 10 paragraph. 11 Q. Okay. Well, let's -- let's put you in the 12 shoes of if you were the editor reviewing this article 13 for acceptance, if they had not done that, would you 14 have approved that article for -- for publication? 15 A. When I'm reviewing articles as an 16 associate editor and forwarding them to my editor with 17 my recommendations, whether an article should be 18 accepted, rejected or not, and sometimes I sat for 19 two, three, maybe four rounds with the investigators 20 going back and forth about, you know, Here is what the 21 reviewer said, here is what I'm saying, and it's still 22 not taken care of, what I'm looking for is -- is 23 balance. I'm looking for a -- a fair, expansive 24 explanation and to the degree that you can place in a</p>

Page 162

1 hierarchy some of the reasons that you are giving,
 2 fine, if you can't, just be -- be fair and -- and be
 3 expansive in what you include.
 4 So if -- if you don't include some of the
 5 things that could impact the relative risks that they
 6 saw, then you are -- are not being expansive in your
 7 explanation.
 8 So the way I edit papers, they would have
 9 to address both the strengths and the weaknesses,
 10 potential weaknesses in a -- a manner to the degree
 11 that -- that I understand them applicable to what they
 12 are writing.
 13 Q. Let's take the proposition that you put
 14 forth in -- in Section III.O of your report at -- at
 15 face value, which appears to be, and you can -- and I
 16 expect you will obviously correct me if I'm
 17 misunderstanding you here, but you are saying that
 18 this is a population of people, hypertensives mainly,
 19 who are already at a greater risk of cancer than the
 20 rest of the world, is that right?
 21 A. The best epidemiologic evidence we have in
 22 hypertensive populations is that there are multiple
 23 cancers in multiple kinds of hypertensive patients
 24 medicated, unmedicated, that are linked either to the

Page 163

1 presence or absence of hypertension and/or the level
 2 of blood pressure. That doesn't tell you why they are
 3 at apparently higher risk. It just tells you they
 4 are.
 5 Q. Don't you think it's important that,
 6 particularly for these people, not to -- to add to
 7 that risk unnecessarily?
 8 MR. FOWLER: Objection; form.
 9 BY THE WITNESS:
 10 A. The -- again, I think I know where you are
 11 going and I think you read my report and the amounts
 12 of NDMA found in valsartan at the exposure levels and
 13 coupled with the epidemiologic studies, there is no
 14 consistent evidence that the amount of NDMA in
 15 valsartan consumed by people in roughly four and a
 16 half years, even if they took the max dose at super
 17 high levels compared to what the FDA said, even
 18 approached, they are probably 30, 40 times lower than
 19 what you get in animal models where you start seeing,
 20 on a microgram-per-kilogram basis, cancer.
 21 So, again, this is an argument that has
 22 context to understand it and it is a different
 23 question than is it biologically plausible that NDMA,
 24 nitrosamines and other similar substances can cause

Page 164

1 cancer, because the devil is in the details. It
 2 depends on the exposure.
 3 BY MR. DAVIS:
 4 Q. Well, don't you think, though, it is
 5 important not to unnecessarily add to the risk that
 6 hypertensives would -- you contend already have a
 7 higher risk of -- of cancer, don't you think it's
 8 important not to unnecessarily add to that risk?
 9 MR. FOWLER: Objection; form.
 10 BY THE WITNESS:
 11 A. So, I would just answer you like this. If
 12 you can point me to any -- any data that says that the
 13 amount of exposure from valsartan with NDMA in it has
 14 increased cancer risk, I'd like to know what it is.
 15 If you have data like that, then we can -- we can
 16 discuss it.
 17 If you are asking me in a theoretical
 18 and -- and all, I would just say is there data to
 19 support that position and I'll hang up and listen.
 20 BY MR. DAVIS:
 21 Q. You don't think that NDMA or NDEA
 22 decreased cancer risk, do you?
 23 A. So what kind of question is that? I mean,
 24 do I think it decreases cancer risk? There is no

Page 165

1 evidence that it decreases cancer risk.
 2 Q. So the two options in your mind are either
 3 potentially no effect or a carcinogenic effect,
 4 correct?
 5 MR. FOWLER: Objection; form, mischaracterizes.
 6 BY THE WITNESS:
 7 A. Depending on the circumstances, those are
 8 going to be the two outcomes that -- that you would
 9 be -- be looking at.
 10 BY MR. DAVIS:
 11 Q. And you -- do you not think that it --
 12 it's important for hypertensives who you claim to be
 13 already at a higher risk of cancer not to
 14 unnecessarily add to that risk?
 15 MR. FOWLER: Objection; form, asked and
 16 answered.
 17 BY THE WITNESS:
 18 A. Again -- again, based on the evidence we
 19 have in humans, the -- in a case is specious at best.
 20 We have arsenic in our drinking water. We have
 21 acceptable levels of arsenic. We have contaminants,
 22 we have impurities, we have things that are in our
 23 drugs, including NDMA, that are -- are there and --
 24 and all. So the -- the argument is not are they there

Page 166

1 or are they not there. The argument is -- is more
 2 nuanced than that.
 3 BY MR. DAVIS:
 4 Q. Is it your opinion that the presence of
 5 nitrosamines in drugs is unavoidable or a necessary
 6 evil that we have to contend with?
 7 MR. FOWLER: Objection; form, beyond the scope.
 8 BY THE WITNESS:
 9 A. Well, that's actually not an area that I'm
 10 going to offer much of an opinion on. It -- it
 11 must -- there must be some difficulty because we've
 12 had multiple products that have shown up with it in
 13 there from reputable manufacturers.
 14 So there are multiple ways that it can get
 15 in there and -- and all and it's not all even the
 16 manufacturing process. Some of it can occur -- occur
 17 afterwards. So, it -- again, it's just multiple ways
 18 that NDMA can get in there.
 19 BY MR. DAVIS:
 20 Q. But you've -- you've done no independent
 21 analysis is what you are saying?
 22 MR. FOWLER: Objection; form.
 23 BY THE WITNESS:
 24 A. So what I've done is I have used

Page 167

1 FDA/European data and even augmented the -- the top
 2 level of exposure per 320-milligram pill and made the
 3 assumption, which is not true, that everybody would be
 4 up at 320-milligram pill containing the levels at
 5 really higher levels of NDMA and calculated an
 6 exposure and related that to the body weight and
 7 compared it to animal models.
 8 And you know what's in my report and you
 9 know that the animal models are a lot more of an
 10 exposure and you also know that in the human studies
 11 the evidence that this exposure to valsartan causes
 12 cancer is firstly nonexistent.
 13 BY MR. DAVIS:
 14 Q. Well, let's -- you jumped around a little
 15 bit there. Let -- let's stick with the beginning part
 16 of your statement, and -- and my question -- follow-up
 17 question to that is: Are you aware that the FDA's
 18 position is that there should be zero nitrosamines in
 19 any of these valsartan drug substances?
 20 MR. FOWLER: Objection; form, colloquy, facts
 21 not in evidence.
 22 BY THE WITNESS:
 23 A. So if the FDA's position is that, somebody
 24 needs to explain to me why they set an acceptable

Page 168

1 limit.
 2 BY MR. DAVIS:
 3 Q. Have -- you have -- have you done any
 4 research into the FDA's thinking on why they set
 5 acceptable interim -- interim limits?
 6 A. I asked the -- the question. They set
 7 acceptable limits because getting to zero, just like
 8 anything, zero in the arsenic in -- in water may not
 9 be -- be feasible to actually do. Okay. And so if
 10 they are not kicking drugs off the market because they
 11 have some NDMA in them, it is a threshold level that
 12 they are -- they are setting.
 13 Q. Have you -- have you done any research to
 14 determine whether it was infeasible for these
 15 manufacturers to manufacture valsartan free and clear
 16 of nitrosamines?
 17 MR. FOWLER: Objection; form, beyond the scope.
 18 BY THE WITNESS:
 19 A. Well -- well, first of all, that's not my
 20 area of expertise. Secondly, even the FDA, they had a
 21 conference on this, even the FDA tells you that the
 22 NDMA can come in through the manufacturing process, it
 23 can come in even after the drug has been packaged, and
 24 so finding NDMA does not necessarily mean that it

Page 169

1 automatically was there from the manufacturing
 2 process. It certainly could be and it could be other
 3 causes of it. And, again, the FDA is not setting a
 4 zero tolerance on this and there is a reason they are
 5 not setting a zero tolerance on this. They are
 6 setting an acceptable limit.
 7 BY MR. DAVIS:
 8 Q. Well, they -- they have in a way set a
 9 zero tolerance by saying it's their expectation
 10 that -- that drug products should contain zero
 11 nitrosamines.
 12 Are you not aware of that?
 13 MR. FOWLER: Objection; form, facts not in
 14 evidence.
 15 BY THE WITNESS:
 16 A. Well, what I'm aware of is that there are
 17 compounds still on the market today that have
 18 detectable NDMA that the FDA has not taken off the
 19 market. And so while they may have discussions and
 20 they are very bright people, very talented, much more
 21 so than people give them credit for, there is a reason
 22 they have a detectable -- they have a limit of what
 23 you can be exposed to. And in a perfect world, you'd
 24 like zero arsenic in your water and you'd like zero

<p style="text-align: right;">Page 170</p> <p>1 NDMA, but there is a reason they have set a -- a limit 2 and there is a reason that drugs that are under that 3 limit are -- are not being pulled off but still may 4 have detectable NDMA. 5 BY MR. DAVIS: 6 Q. There is no manufacturer of water out 7 there, is there? 8 MR. FOWLER: Form. 9 BY THE WITNESS: 10 A. Actually, yes, there is. There are people 11 who do things to water in all -- and in the public 12 sphere our water, drinking water is tested and there 13 are acceptable levels of potential carcinogens, 14 including arsenic, in our water. 15 BY MR. DAVIS: 16 Q. Have you done any research whatsoever to 17 determine -- have you read any of the -- let me strike 18 that. 19 Have you -- have you read any of the root 20 cause reports of any of these manufacturers as to 21 exactly how NDMA or NDEA got in there? 22 MR. FOWLER: Objection; form, outside the scope. 23 BY THE WITNESS: 24 A. Actually, I have. I've read multiple</p>	<p style="text-align: right;">Page 172</p> <p>1 Q. Okay. Let's go to Section VII of your 2 report, Valsartan Recall and Impact on Hypertension 3 Patients. 4 A. Okay. 5 Q. You use the word "unexpected" in 6 describing the NDMA, NDEA contamination several times. 7 Do you see that? 8 A. Yes. 9 Q. Did you do any investigation or 10 independent analysis on your own to try to figure out 11 whether, in fact, the NDMA or NDEA contamination was 12 unexpected? 13 A. Well, certainly the FDA used the 14 terminology "unexpected," and secondly, I'm -- I'm all 15 ears if you can tell me what independent analysis I 16 should have done or would have been able to do to -- 17 to make that determination. 18 Q. If, for example, one of these 19 manufacturers had actual knowledge of NDMA 20 contamination a long time before the recall, would 21 that still qualify as unexpected in your opinion? 22 MR. FOWLER: Object. Objection; form, facts not 23 in evidence. 24 BY THE WITNESS:</p>
<p style="text-align: right;">Page 171</p> <p>1 sources of how the NDMA potentially got in there and I 2 also know it can get in through multiple channels. 3 And, so, yes, I mean, I -- I basically have read 4 material. 5 BY MR. DAVIS: 6 Q. Okay. Where -- where in your materials 7 considered list did you review the manufacturer of 8 root cause analyses? 9 A. There are documents in there that the FDA 10 has where they discuss it where it came in there and 11 there are articles that are listed that discuss how it 12 appears the NDMA got -- got in there and those are 13 articles I read. 14 Q. Is it your contention that you've reviewed 15 anything that suggests to you that any of these 16 manufacturers are unable to figure out how to 17 manufacture valsartan free and clear of nitrosamines? 18 MR. FOWLER: Objection; form, beyond the scope. 19 BY THE WITNESS: 20 A. I think it is a question you need to ask 21 them. I have no insight into their manufacturing 22 processes and I'm not equipped to render an opinion on 23 that. 24 BY MR. DAVIS:</p>	<p style="text-align: right;">Page 173</p> <p>1 A. Well -- well, first of all, the date of 2 the recall I'm sure is not the first date that the FDA 3 had communication with companies, but, again, that's 4 beyond my -- my scope. For us who depend on the FDA 5 to police our drug supply, it absolutely was -- was 6 unexpected. And FDA used the terminology "unexpected" 7 as well. So if I'm in bad company, I'm in bad company 8 with the FDA on that. 9 BY MR. DAVIS: 10 Q. What about if one of these manufacturers' 11 raw material suppliers explicitly warned them of the 12 potential for nitrosamine formation in the very 13 process that they were doing to make valsartan as far 14 back as 2014, would that qualify still as unexpected 15 in your opinion? 16 MR. FOWLER: Objection; form, facts not in 17 evidence, scope. 18 BY THE WITNESS: 19 A. How would you expect me to know what a 20 manufacturer told anybody? So it would still be 21 unexpected to me because that is not any kind of 22 communication I would have had any access to. 23 BY MR. DAVIS: 24 Q. Okay. So you've done no independent</p>

<p style="text-align: right;">Page 174</p> <p>1 analysis that leads you to a conclusion that the 2 contamination was indeed unexpected, you're just 3 relying on what you contend to be the FDA's use of 4 that word, correct? 5 MR. FOWLER: Objection; form, mischaracterizes. 6 BY THE WITNESS: 7 A. Actually, no, what I am saying is given 8 what I was privy to and my dependence on the FDA for 9 safeguarding our -- our drug supply that when this 10 became known, it was unexpected. 11 BY MR. DAVIS: 12 Q. So you're -- but that's not your -- 13 your -- you are not describing any -- any independent 14 analysis or documents that you've reviewed to actually 15 determine whether it was unexpected for any of these 16 manufacturers, isn't that right? 17 A. My reporting of being unexpected is from 18 the vantage point that I sit in. I do not see 19 documents like that. And so from my vantage point, it 20 was unexpected. The FDA sees more than I do and from 21 their advantage point it was unexpected as well. 22 Q. But you're not sure what the FDA reviewed 23 at all in making or not making that statement? 24 MR. FOWLER: Objection; form, beyond the scope</p>	<p style="text-align: right;">Page 176</p> <p>1 MR. FOWLER: Objection to form, outside the 2 scope, mischaracterizing, lack of foundation. 3 BY THE WITNESS: 4 A. I was given a -- a narrow assignment and I 5 looked at documents that were relevant to 6 understanding my focused assignment. There are people 7 who have expertise in these areas about manufacturing 8 that far exceed mine and those questions are best 9 either asked of them or -- or somebody involved in the 10 manufacturing. 11 I had more documents than I ever looked at 12 in all and I -- I had plenty of documents to come to 13 the conclusions, and unless you can tell me that I 14 have really missed something of critical importance or 15 made an error in judgment, I mean, this is just coffee 16 house crap. 17 BY MR. DAVIS: 18 Q. The last sentence of that Section VII 19 says: 20 "I did not witness any patients have an 21 adverse effect as a result of the NDMA, NDEA 22 impurities found in valsartan." 23 Do you see that? 24 A. Yes.</p>
<p style="text-align: right;">Page 175</p> <p>1 of this general causation expert. 2 BY THE WITNESS: 3 A. So what -- what I do know from having 4 worked with the FDA, and in an ad hoc basis in -- as a 5 standing member of FDA Cardiorenal Advisory Panel, is 6 they are -- they are awfully smart and they are 7 awfully talented and, if anything, they are -- are 8 tilted to be harder on -- on industry than, you know, 9 than -- they probably go a bit the other way, and it's 10 important that they do that because it helps safeguard 11 us from catastrophes. 12 So I have tremendous respect for not just 13 sitting around looking at stuff on the internet. I've 14 been to the FDA, I've worked with the FDA, and I know 15 how it works and I've interfaced with their -- their 16 scientists, so I have a pretty informed opinion when I 17 say I have great trust in the Food and Drug 18 Administration. 19 BY MR. DAVIS: 20 Q. You had the opportunity to ask counsel for 21 internal documents of these manufacturers or 22 depositions, for example, of their witnesses that were 23 taken where these topics were discussed. 24 Why did you not ask for any of that?</p>	<p style="text-align: right;">Page 177</p> <p>1 Q. Have you had any hypertension patients of 2 yours receive a cancer diagnosis in the last five, six 3 years? 4 MR. FOWLER: Objection; form. 5 BY THE WITNESS: 6 A. I'm sure I have, yeah. 7 BY MR. DAVIS: 8 Q. For any of those patients, did you do any 9 work to rule out NDMA or NDEA contamination as having 10 contribute -- contributed to their cancer diagnosis? 11 A. Perhaps you can explain to me how you rule 12 out a cause of cancer in an individual that can't be 13 found in hundreds of thousands of people. 14 Q. Well, you appear to be ruling out NDMA, 15 NDEA impurities by making that statement that you did 16 not witness any adverse effects. I'm trying to get to 17 what you mean by that sentence? 18 A. Well -- 19 MR. FOWLER: Objection, argumentative. 20 BY THE WITNESS: 21 A. -- well, first of all, the -- the adverse 22 effect has to do with when the drug is recalled, and 23 if I'm not mistaken, it says "Valsartan Recall and the 24 Impact on Hypertension Patients." It's not talking</p>

<p style="text-align: right;">Page 178</p> <p>1 about cancer. It is really talking about what went on 2 with patients when we found out that there were lots 3 that had impurities in it and that patients needed 4 alternative therapies. That's really where my 5 comments are.</p> <p>6 And when I say that I didn't see any harms 7 to patients during this transition, No. 1, we have 8 plenty of ARBs on the market. Valsartan, irbesartan 9 and losartan were involved in the recall of the 10 generics.</p> <p>11 Two, I've still got five or so other ARBs 12 to choose from. There is zero problem with 13 substitute. Okay. So the transition was fairly 14 seamless once we found out there was a problem between 15 us and the pharmacies and getting people onto other -- 16 other therapies.</p> <p>17 The danger is they read about lawsuits, 18 they read about stuff and -- and potentially causing 19 cancer and what they -- they will do sometimes is stop 20 the drugs on their own, okay. I saw people do that. 21 I didn't see anybody get specifically harmed from 22 that, but that's not something you really, really want 23 to do.</p> <p>24 So my -- my -- I stand behind my statement</p>	<p style="text-align: right;">Page 180</p> <p>1 NDMA. If you have anybody who tells you that they 2 know how to do that, they are pulling your leg, okay. 3 You -- you can't do that, but what I can do, because I 4 take care of patients and we talk to patients and I 5 see them in my practice is I know when I've got a 6 problem.</p> <p>7 Back in the 1990s when they were talking 8 about calcium channel blockers, increased 9 cardiovascular risk caused cancer, whatever, I had 10 patients flushing their nifedipine, okay, but as a 11 practitioner who goes in and closes the door and takes 12 care of people, I know how to deal with that.</p> <p>13 Fast forward to this valsartan recall, 14 when the valsartan recall happened, we had zero 15 problem transitioning patients to appropriate 16 alternative therapies. Our biggest problem was people 17 who read something online or heard about it on the 18 news or in the newspaper or wherever and decided on 19 their own not to take the drugs because they were 20 basically weighing the short-term (sic) risk of 21 continuing to taking the drug and minimizing the 22 short-term risk of not taking the drug, which is much 23 more substantial.</p> <p>24 BY MR. DAVIS:</p>
<p style="text-align: right;">Page 179</p> <p>1 that I really didn't see anybody harmed in making the 2 transition from these drugs that had NDMA in it to 3 other ARBs.</p> <p>4 BY MR. DAVIS:</p> <p>5 Q. Okay. And I'm jugs trying to get to the 6 bottom of what you did to back that statement up and 7 what you mean by it.</p> <p>8 So it sounds like you are just saying that 9 that's purely observational on your part, that you did 10 not witness any adverse effect as a result of 11 nitrosamines, it is not that you actually did some 12 kind of follow-up or a specialized treatment regimen 13 for any of those patients that were on recalled 14 valsartan products to rule out NDMA or NDEA as -- as 15 causing their cancer, correct?</p> <p>16 MR. FOWLER: Objection; form, foundation, 17 compound.</p> <p>18 BY THE WITNESS:</p> <p>19 A. So, again, I'll go back to the heading 20 here, it says Valcar -- "Valsartan Recall and Impact 21 on Hypertension Patients." So it's really talking 22 about the recall. And what was the impact of the 23 recall on hypertensive patients. You are trying to 24 take it back to I should have done something about</p>	<p style="text-align: right;">Page 181</p> <p>1 Q. Okay. I appreciate that, Doctor, but 2 my -- my question, and I'm not by any means suggesting 3 you should have done -- I mean, you're a hypertension 4 specialist, you are not an oncologist, I'm not 5 suggesting you should have done any work to rule out 6 NDMA or NDEA contamination as having contributed to 7 any cancer that any of your patients received as a 8 result of being on recalled valsartan products.</p> <p>9 I'm just trying to clarify that you did 10 not do any of that. Is that -- is that right? And 11 I'm not saying I expected you to. I'm just saying you 12 did not, is that right?</p> <p>13 MR. FOWLER: Objection to colloquy. Objection 14 to colloquy and form.</p> <p>15 BY THE WITNESS:</p> <p>16 A. That's exactly what you are saying, and my 17 response to that is if you can tell me what you can do 18 to rule this out at an individual patient level, I am 19 all ears because there is nobody, I don't care what 20 your training is, who knows how to do that.</p> <p>21 BY MR. DAVIS:</p> <p>22 Q. Okay. So the answer is -- is, no, that 23 you did not make any effort to rule out NDMA or NDEA 24 contamination for any of those patients?</p>

<p style="text-align: right;">Page 182</p> <p>1 MR. FOWLER: Objection; foundation, 2 mischaracterizing. 3 BY THE WITNESS: 4 A. Anyone who was on a drug product that had 5 unacceptable limits of NDMA in it, we got them 6 transitioned. Beyond that, the ability to 7 investigate -- I'm not -- I'm not into wasting my 8 time. I'm into spending time on things that can help 9 people and help us take care of them. There is no way 10 at an individual patient level that you can rule out 11 anything except get them off the drug and keep them 12 under surveillance. 13 BY MR. DAVIS: 14 Q. Okay. And it's your -- I think you've 15 alluded to this a couple of times, but your practice 16 was able to swiftly and seamlessly transition patients 17 to an appropriate alternative therapy? 18 A. You know, we did that, and if we couldn't 19 do that, we would be awfully dumb, which we aren't. 20 Q. Okay. Are any of your patients still on 21 valsartan products that have nitrosamines in them? 22 MR. FOWLER: Objection; form. 23 BY MR. DAVIS: 24 Q. To your knowledge?</p>	<p style="text-align: right;">Page 184</p> <p>1 Q. Is it fair to -- to say that Section IX of 2 your report is kind of a synthesis, and I'm just 3 trying to understand where you are coming from there, 4 but Section IX of your report is a synthesis of your 5 opinions that you reach in Sections VIII and 6 Sections III.O of your report? 7 MR. FOWLER: Objection to form. 8 BY THE WITNESS: 9 A. So why don't you clarify what you are 10 asking me there. 11 BY MR. DAVIS: 12 Q. Sure. 13 So in -- in Section III.O of your report, 14 you put forth opinions on hypertension and can -- and 15 cancer and there being risk factors. In Section VIII 16 of your report you posit that there is no causal 17 relationship between NDMA, NDEA in valsartan and 18 cancer. In Section IX of your report is a synthesis 19 of those two sections where you posit that it is more 20 likely that patients developed these cancers from 21 their status as being hypertensive as opposed to 22 exposure to nitrosamines. 23 Is that a fair reading of your report, 24 that it synthesizes those two sections?</p>
<p style="text-align: right;">Page 183</p> <p>1 A. To my knowledge, no. 2 Q. Did you keep a single one of your patients 3 on recalled valsartan a day longer than they had to be 4 on recalled valsartan? 5 MR. FOWLER: Objection to the form, foundation. 6 BY THE WITNESS: 7 A. No. We transitioned them as soon as we 8 could. 9 MR. DAVIS: Let me take a -- a quick break to 10 review my notes. I'm getting close to the end here. 11 What do you say, five minutes? 12 MR. FOWLER: That's fine, Counsel. 13 MR. DAVIS: Sure. Let's go off the record. 14 THE VIDEOGRAPHER: The time is two o'clock p m. 15 We are off the record. 16 (WHEREUPON, a recess was had 17 from 2:00 to 2:23 p m.) 18 THE VIDEOGRAPHER: It's 2:23 p.m. We are on the 19 record. 20 BY MR. DAVIS: 21 Q. Dr. Flack, before I wrap up, I just wanted 22 to touch on briefly Section IX of your report, which 23 appears at Page 39. 24 A. Okay.</p>	<p style="text-align: right;">Page 185</p> <p>1 MR. FOWLER: Objection; form, vague. 2 BY THE WITNESS: 3 A. So -- so I'll -- I'll state what I'm 4 trying to say. 5 When you do -- you look at the Pottegard 6 study, you look at the Gomm study, you basically 7 firstly find nothing there in humans when they've been 8 studied with exposed and unexposed valsartan patients. 9 And so you really don't have virtually any evidence in 10 humans. And then you look at a group of people who, 11 whether they are taking valsartan or not, you know 12 that they have higher risk. In the absence -- that 13 statement is more about the absence of data in humans, 14 in human studies, the unconfounded studies that you 15 can find an increase in risk. 16 So you're -- you're left with a 17 plausible -- a synthesis of the data is that if there 18 is no data in humans that are -- expands into the 19 hundreds of thousands that there is increased risk and 20 there are hypertensives both in the exposed and 21 control group, then it is very hard to say that any 22 exposure to NDMA at levels well below what is -- 23 causes cancer in animals is playing a -- a role here. 24 So essentially that -- that's what -- what I'm saying</p>

Page 186

1 and that's the data and that -- that's not disputable.
 2 BY MR. DAVIS:
 3 Q. Well, I get that that's the substance
 4 of -- of your opinions as expressed in Sections III.O
 5 and VIII.
 6 My question is more just as to the
 7 structure of your report which is: Am I correct in
 8 reading Section IX as an output of the opinions that
 9 you express in Sections III.O and VII -- or in VIII?
 10 My apologies.
 11 MR. FOWLER: Objection; form.
 12 BY THE WITNESS:
 13 A. Well, here is the way I would answer that.
 14 Really, there is no inconsistencies and there is a
 15 logical sequencing of the data, how it was laid out
 16 and how it was considered to develop an aggregate
 17 opinion. So these areas of the report are -- are
 18 connected and the -- the end result is my opinion,
 19 which certainly I have no real reason to believe any
 20 different based on all that I know.
 21 BY MR. DAVIS:
 22 Q. Okay. And it's correct that you don't
 23 cite anything new in Section IX of your report,
 24 correct, aside from a filing by the plaintiffs in the

Page 187

1 litigation?
 2 A. Section IX was written before the report
 3 was sent, anything that is needed to be referenced is
 4 referenced in there, so there is nothing that's come
 5 up beyond that.
 6 Q. Okay.
 7 MR. DAVIS: Okay. That's -- that's all I have.
 8 I -- I pass the witness. Thank you.
 9 THE WITNESS: Thank you.
 10 MR. FOWLER: Can -- can you all hear me if I
 11 continue to speak using the doctor's computer's
 12 microphone and rather than my own?
 13 MR. DAVIS: I can hear you.
 14 MR. FOWLER: Okay.
 15 EXAMINATION
 16 BY MR. FOWLER:
 17 Q. Dr. Flack, do you understand whether your
 18 report in this case applies only to Teva or does it
 19 apply to all of the generic manufacturing -- strike
 20 that -- or does it apply to all of the defendants in
 21 this case?
 22 MR. DAVIS: Objection to form. Objection;
 23 leading.
 24 BY MR. FOWLER:

Page 188

1 Q. Let me rephrase.
 2 Doctor, what is your understanding of
 3 the -- well, what -- do -- do you have an
 4 understanding whether your report applies only to
 5 Teva?
 6 MR. DAVIS: Same objections.
 7 BY THE WITNESS:
 8 A. Yes, I do. I was initially contacted in
 9 that Teva -- by Teva, but it is my understanding that
 10 I am -- my report also applies to the other defendants
 11 in the case.
 12 BY MR. FOWLER:
 13 Q. And, Doctor, directing your attention to
 14 the materials considered list, I believe it's on -- on
 15 Page 4, do you see the FDA Regulatory Documents, the
 16 Laboratory Analysis of Valsartan Products?
 17 A. Yes, I do.
 18 Q. Is that a document you reviewed in this
 19 case?
 20 A. If I reviewed it, it was cursory.
 21 Q. Do you recall whether that document
 22 contains FDA's finished dose testing for each of the
 23 manufacturing defendants in this case?
 24 A. No, I do not.

Page 189

1 Q. Based upon your review of the levels of --
 2 that FDA tested in finished doses, how did you arrive
 3 at the -- the level that you measured -- or that you
 4 utilized in reaching your opinions?
 5 MR. DAVIS: Objection; foundation. I think he
 6 just testified that he only reviewed it in a cursory
 7 manner and does not recall the -- that they tested
 8 finished dose levels. So I'm objecting to foundation
 9 there.
 10 MR. FOWLER: Well, I don't think that's --
 11 that's what he said, Counsel.
 12 BY THE WITNESS:
 13 A. So, my -- I used a -- a couple of
 14 assumptions that really augmented the exposure that
 15 someone theoretically could have had.
 16 No. 1, most of the testing was below
 17 20.1 micrograms. I used 24.1 which was -- was well
 18 above that, certainly well above the average.
 19 Two, I made the assumption that everyone
 20 got a 320-milligram pill, which is not correct because
 21 the 10-milligram -- the 160 has probably 10 micrograms
 22 in it or -- on average.
 23 So -- and the third assumption I made was
 24 that people took the pill every day at the highest

<p style="text-align: right;">Page 190</p> <p>1 dose, which is also not true because many people who 2 even refill prescriptions don't take the medicine and 3 they'll stop it. 4 So that was the -- the way that I did 5 this, and it was really teed off of the FDA and the 6 European agencies and summarizing their -- their 7 testing data, and that's how I arrived at those 8 exposures. 9 BY MR. FOWLER: 10 Q. Where -- where did you get the 11 20.1-microgram level that you just referenced? 12 A. That was probably in the -- in the testing 13 data that was supplied. But I -- again, I didn't 14 spend a lot of time on it. 15 Q. Doctor, based upon your testimony that the 16 level in valsartan is insufficient to cause cancer, 17 there would be no need to rule out NDMA as a cause of 18 cancer in your hypertension patients, correct? 19 A. What I don't know -- 20 MR. DAVIS: Objection; leading. Sorry. 21 BY THE WITNESS: 22 A. What I repeatedly said is I do not know 23 how to rule out NDMA as a cause of cancer in an 24 individual patient when you can't find it in hundreds</p>	<p style="text-align: right;">Page 192</p> <p>1 mark what has been previously provided to -- to 2 counsel. I want to mark your supplemental list of 3 materials considered as the next exhibit. I believe 4 it's possibly 11. 5 MR. FOWLER: Whatever the next exhibit is, Madam 6 Court Reporter. 7 MR. DAVIS: Steve, I've -- I've marked ours as 8 Plaintiffs, Plaintiff-X -- Flack, so -- 9 MR. FOWLER: That's fine. 10 MR. DAVIS: -- you probably don't want to mark 11 that as a plaintiff's exhibit? 12 MR. FOWLER: I'll mark it as Flack what is the 13 next number. I don't mind using your nomenclature 14 just so they are all together, Counsel. 15 MR. DAVIS: That's fine. That's fine. 16 MR. FOWLER: Would it be 12? 17 MR. DAVIS: It would be -- let's see. 18 MR. FOWLER: Madam Court Reporter, you can 19 easily tell us that. 20 MR. DAVIS: It would be 12. 21 MR. FOWLER: Okay. Thank you. 22 (WHEREUPON, a certain document was 23 marked Plaintiff-Flack Deposition 24 Exhibit No. 12, for identification,</p>
<p style="text-align: right;">Page 191</p> <p>1 of thousands of patients. So I -- I don't know how to 2 do it, and I'm a pretty good doctor. 3 BY MR. FOWLER: 4 Q. Doctor, if FDA's finished dose testing of 5 all of the defendant manufacturers' finished dose 6 products was -- with -- with the exception of one was 7 below 20.1, would you need to know each of those lower 8 levels to render your opinion? 9 MR. DAVIS: Objection; foundation. 10 BY THE WITNESS: 11 A. So in -- I went well above the highest 12 level in the assumptions I made about exposure. 13 BY MR. FOWLER: 14 Q. And does that opinion with regard to the 15 exposure level, would you apply that to each of the 16 defendants in this case? 17 MR. DAVIS: Objection. 18 MS. KAPKE: Was there an answer to that 19 question? I'm sorry. I didn't hear it. 20 BY THE WITNESS: 21 A. Yes. 22 MS. KAPKE: Thanks. 23 BY MR. FOWLER: 24 Q. A little housekeeping. I -- I want to</p>	<p style="text-align: right;">Page 193</p> <p>1 as of 09/28/2021.) 2 BY MR. FOWLER: 3 Q. As -- as Plaintiffs' Flack Exhibit 12, I'm 4 putting before you the supplemental reliance list, 5 Doctor. 6 Have you seen this document before? 7 A. Yes, I have. 8 MR. FOWLER: And I also want to mark a -- a 9 flash drive which contains all of your reliance 10 material which has been provided to -- to counsel, but 11 I'd like to mark this as -- as Plaintiff-Flack 13. 12 And, Madam Court Reporter, we'll -- we'll 13 overnight the flash drive to you, is that all right, 14 we'll put it in an envelope? 15 THE COURT REPORTER: Yes. 16 MR. FOWLER: Okay. So we'll put that there. 17 (WHEREUPON, a certain document was 18 marked Plaintiff-Flack Deposition 19 Exhibit No. 13, for identification, 20 as of 09/28/2021.) 21 MR. FOWLER: Madam Reporter, we want to 22 introduce an exhibit through the -- through the chat 23 since we obviously don't have the link, but we're 24 having difficulty.</p>

<p style="text-align: right;">Page 194</p> <p>1 Can we -- do you understand why we may not 2 be able to introduce that in the chat room? 3 THE COURT REPORTER: No. 4 MR. FOWLER: Or how we can upload this exhibit? 5 It is just not dropping in. 6 MR. DAVIS: Hey, Steve, while she is looking 7 into that, was this supplemental list of materials 8 that you've marked as 12, was that provided to me? 9 MR. FOWLER: It was. Counsel, it was in the -- 10 the 48 hours before set of documents that we provided. 11 And -- and, Counsel, I can tell you that 12 it goes to Page 20 -- it goes to Page 22. It doesn't 13 say supplemental. That's our -- our bad, but it -- 14 you'll know that it is the supplemental list because 15 it goes to -- to 22 as opposed to I think 20 on the -- 16 the previous. 17 MR. DAVIS: Okay. I'm going to reserve my 18 rights on that until I can confirm that that was 19 actually provided to me. I'm not saying that it 20 wasn't, but I -- I don't have it, so. 21 MR. FOWLER: Sure, sure. I understand. 22 Can -- Madam Reporter, can we e-mail you 23 the exhibit we want to -- to introduce? How can we -- 24 we can present this? Because typically we are able to</p>	<p style="text-align: right;">Page 196</p> <p>1 MR. DAVIS: And, Steve, before you continue, let 2 me just state a continuing objection here because 3 I'm -- I'm not sure I received this supplemental list 4 of materials, having just gone through my e-mails. 5 So I'm just going to as a matter of 6 caution put a continuing objection on the record on 7 that. 8 MR. FOWLER: Okay. I'm not -- I'm not asking 9 about it. All I did is mark it, Counsel. I'm not 10 asking any other questions other than you've seen it 11 and it's marked. None of these -- this is -- I've 12 moved past that. 13 MR. DAVIS: Okay. 14 MR. FOWLER: So you -- your objection is noted 15 and I understand if -- if there is some -- I 16 understand your objection and your reservation. 17 BY MR. FOWLER: 18 Q. Counsel (sic), do you recall a -- the 19 questions about the -- the research grants that you 20 have been awarded over the years in the course of your 21 professional career? 22 A. Yes, I do. 23 Q. With regard to the money that -- that 24 is -- is the grant, if you will, who gets that money?</p>
<p style="text-align: right;">Page 195</p> <p>1 drop it into the chat and it is not happening. 2 THE COURT REPORTER: I would suggest that you 3 e-mail it to Mr. Davis and he upload it. 4 MR. FOWLER: Okay. We'll do that. We'll do 5 that. And just lift that up so it's ready and I'll 6 tell you when to send it, please. 7 BY MR. FOWLER: 8 Q. Doctor, early on in this deposition, you 9 were asked whether any category of documents relied 10 upon in reaching your opinion that's not listed. 11 Do you recall that, that question? 12 A. Yes, I do. 13 Q. Is there any other source of information 14 that you relied upon in forming your opinions that was 15 not listed? 16 A. Well, I have decades of experience. Even 17 after my formal residency training, I've learned more 18 medicine, more epidemiology, since I finished my 19 medical training and my epidemiology training through 20 the school of hard knocks application, going through 21 the peer review and grant process. So that would be 22 a -- a source of knowledge that would really buttress 23 any of the specific material listed in -- in the 24 documents that were provided to me or I pulled.</p>	<p style="text-align: right;">Page 197</p> <p>1 A. So the vast majority of the money that 2 comes in for a grant goes to support space rental, 3 personnel needed to -- and professionals, dieticians, 4 nurses, medical assistants, receptionists, secretaries 5 to actually do the work. The school always gets a 6 cut, and there are indirect costs. The investigators, 7 particularly in an industry-sponsored grant, really 8 get a small sliver of that, and typically what happens 9 is it -- it goes into your salary to support your 10 existing salary and is not added on top of it. So 11 it's a level of support that is there, but only a -- a 12 few percentage points of the overall total grant go -- 13 come directly to you as the investigator. 14 Q. Doctor, directing your attention to 15 Page 25 of your report, in that paragraph under 16 Section O, Epidemiology of Hypertension and Cancer, do 17 you recall being asked questions about the -- the 18 second sentence in that paragraph that begins "BP 19 level"? 20 A. Yes, I do. 21 Q. Now, is the actual -- hypertension is 22 actually the -- the blood pressure level. Have I got 23 that part right? 24 A. The hypertension initially diagnosed is</p>

<p>Page 198</p> <p>1 the blood pressure level, but even if your blood 2 pressure is 110 over 70, if you are on 3 antihypertensive drugs you have hypertension despite 4 the fact that your pressure now is a little more on 5 those drugs.</p> <p>6 Q. And my -- my question with regard to the 7 sentence when you referred to kidney cancer, you 8 referred -- is -- is that specific to the blood 9 pressure level as -- I'm going to stop there.</p> <p>10 A. So kidney cancer --</p> <p>11 MR. DAVIS: Objection.</p> <p>12 BY THE WITNESS:</p> <p>13 A. -- unlike a number of cancers appears to 14 show a risk gradient that's in direct relation to the 15 level of blood pressure. That's not true in many 16 other cancers, but for some reason it is in kidney 17 cancer.</p> <p>18 BY MR. FOWLER:</p> <p>19 Q. When -- when you expressed your opinion 20 about the risk of cancer in hypertension patients, 21 other than the actual BP level, what else were you 22 referring to there?</p> <p>23 A. So there -- there are a number of 24 potential explanations for high levels of cancer in</p>	<p>Page 200</p> <p>1 state exactly what it is, what -- what question it was 2 that you were asked to answer in this case, I should 3 say?</p> <p>4 A. Well, I can state it again. I -- I was 5 asked in hypertensive patients to make a general 6 causation determination as to whether the level of 7 exposure to valsartan containing NDMA caused cancer, 8 and that -- that's what I was asked to do.</p> <p>9 Q. And when you say "caused cancer," are you 10 speaking of causing cancer or are you speaking of 11 increased -- any increased risk?</p> <p>12 A. What I'm speaking of is in human studies, 13 basically the best evidence that we have, is there 14 evidence that valsartan in the amounts that were out 15 there for the duration of time potentially in pills 16 caused cancer.</p> <p>17 Q. And did you assess that risk against the 18 patient population that -- that you've pres -- of the 19 type that you've prescribed valsartan to?</p> <p>20 A. Well, in these studies the -- you've got 21 people with hypertension, one, valsartan, you have 22 people who are not on valsartan, and so you've got 23 a -- a reasonably comparable group to -- to look at. 24 And in those studies there is virtually no indication</p>
<p>Page 199</p> <p>1 patients with hypertension, and a lot of it has to do 2 with comorbidities that are listed, some of which 3 intersect on the same cancers, and diabetes, obesity, 4 levels of physical activity, dietary intake, a variety 5 of things that are more common in hypertensive 6 patients than in non-hypertensive patients that have 7 been linked to cancer themselves.</p> <p>8 Q. And, Doctor, for your hypertensive patient 9 population, as a matter of your routine following of 10 those patients, are they subject to ongoing health 11 assessments and surveillance?</p> <p>12 MR. DAVIS: And I'm going to object to the form.</p> <p>13 But, also, Steve, you've accidentally turned your 14 camera off.</p> <p>15 MR. FOWLER: Sorry about that.</p> <p>16 BY THE WITNESS:</p> <p>17 A. So hypertensive patients, if you look at 18 ACC/AHA guidelines, European guidelines and -- and 19 what we do in practice, it -- you basically -- they -- 20 they are surveilled like non-hypertensive patients for 21 other non-cardiovascular conditions.</p> <p>22 BY MR. FOWLER:</p> <p>23 Q. Okay. And, Doctor, bear with me here, 24 can -- have -- have you had an opportunity to -- to</p>	<p>Page 201</p> <p>1 that exposure at this level for this duration causes 2 cancer.</p> <p>3 MR. FOWLER: Counsel, we are sending you an 4 article that we are going to mark as 5 Plaintiffs-Flack 14. You should be receiving it 6 imminently.</p> <p>7 And for the record, this article is 8 published in the Pharmacology & Therapeutics Journal. 9 It's called "Carcinogenesis: Failure of resolution of 10 inflammation?" by Dr. Anna Fishbein, Bruce Hammock, 11 Charles Serhan, and Dipak Panigrahy.</p> <p>12 Tell me when you have it, Counsel, and 13 if -- if you wouldn't mind, please, loading that up.</p> <p>14 MR. DAVIS: Okay. I haven't received it yet.</p> <p>15 MR. FOWLER: Yeah, just give it a beat. It 16 will -- it will pop up.</p> <p>17 Okay. I'll direct it.</p> <p>18 MR. DAVIS: Okay. I've -- I've got it. So 19 what -- what are you asking me to do, Counsel?</p> <p>20 MR. FOWLER: If you can screen share the last 21 page, please.</p> <p>22 MR. DAVIS: Okay. Are you going to be marking 23 this as an exhibit?</p> <p>24 MR. FOWLER: Yes. That's Plaintiffs-Flack 14.</p>

<p style="text-align: right;">Page 202</p> <p>1 (WHEREUPON, a certain document was 2 marked Plaintiff-Flack Deposition 3 Exhibit No. 14, for identification, 4 as of 09/28/2021.) 5 MR. DAVIS: Okay. I'm going to, again, reserve 6 rights. Me marking it as an exhibit, I mean, 7 Plaintiffs' something doesn't mean I'm okay with it. 8 MR. FOWLER: I totally understand. I appreciate 9 your accommodation. 10 MR. DAVIS: It is an .eml link as opposed to a 11 PDF. Let me see if it still -- 12 MR. FOWLER: No, we sent a PDF. We believe we 13 sent it as a PDF. We opened it as a PDF. 14 And -- and, you know, it is -- it is 15 not -- it is not essential if you can't pull it up. I 16 can -- I only have a single question. 17 MR. DAVIS: So I'm going to -- I'm marking 18 this -- I'm going to mark it as 13 (sic). I don't 19 have the supplemental invoice that you've asked to be 20 marked as 12 (sic), so that one is going to be skipped 21 for the record. So I'm renaming this 13 (sic) for the 22 record. 23 MR. FOWLER: Thirteen was the flash drive. 24 MR. DAVIS: Oh, all right. Sorry. It's</p>	<p style="text-align: right;">Page 204</p> <p>1 If you -- if you as an editor of a journal 2 received an article co-written by an author who while 3 writing it had received over half a million dollars 4 from counsel for plaintiffs in a litigation directly 5 on the same issue being written about, would you as an 6 editor expect the conflicts of interest to disclose 7 that? And I'll just stop there. 8 MR. DAVIS: Objection; foundation. I don't 9 think you've even established that the witness has 10 reviewed this article. 11 MR. FOWLER: That's okay. 12 MR. DAVIS: I meant objection to the -- 13 BY THE WITNESS: 14 A. So my understanding of the question is if 15 I'm a journal editor and I'm -- and I have -- I 16 received an article and someone has either first 17 authored, last authored or middle authored the article 18 and they receive half a million dollars from a 19 pharmaceutical company or other entity that they are 20 actually providing expert opinions for, there -- there 21 is just no way that that should not be disclosed. 22 That would be expected to be disclosed. 23 As an editor, you are at the mercy by and 24 large of, one, what people report to you, unless you</p>
<p style="text-align: right;">Page 203</p> <p>1 already -- it's already introduced. We'll have to 2 clear that up later. 3 MR. FOWLER: That's fine, Counsel. Thank you. 4 So I should -- I take it if you are not 5 able to share it, I'll just ask my questions, is that 6 right? 7 MR. DAVIS: I can -- I can share a PDF, but when 8 it loaded into the Golkow remote thing, it loaded as 9 an .eml, so I'm not sure what that means, but I've -- 10 I've got a PDF I can share here. 11 MR. FOWLER: Okay. So at least you can see it, 12 Counsel. That's fine. 13 MR. DAVIS: Okay. That's fine. 14 BY MR. FOWLER: 15 Q. Let -- let me see it and go to the last 16 page. Actually, it's -- it's the -- the declar- -- 17 the dec -- well, the declaration of interest. It's on 18 PDF Page 24 of 37. And I would represent, Doctor -- 19 well, let me ask it this way. 20 Doctor, as counsel said during your 21 questioning, he asked you to put your shoes -- put 22 yourself in the shoes of an editor of a journal. So 23 I'd like you to put those shoes back on, and I want to 24 ask you this question.</p>	<p style="text-align: right;">Page 205</p> <p>1 ever some very specific information that -- that you 2 are aware of. So it's really kind of an honor system, 3 but there -- there is no good explanation for why you 4 would have received that amount of money from an 5 entity while you are working on this litigation and 6 then write a scientific article that is in parallel 7 and essentially the same subject and not include that 8 as a potential conflict. 9 BY MR. FOWLER: 10 Q. And -- and you recall being shown an 11 article that you drafted where in the Conflicts of 12 Interest you disclosed being a speaker for a number of 13 pharmaceutical companies. 14 Do you recall that? 15 MR. DAVIS: I just meant to get an objection on 16 the record there before you move on that I object to 17 that as proffering an expert opinion on -- on 18 something the -- the witness is not designated to -- 19 to -- as an expert on. 20 THE WITNESS: I actually am an expert. I'm a 21 general editor. 22 MR. FOWLER: Objection to the -- 23 MR. DAVIS: You haven't been proffered as an 24 expert though, Dr. Flack.</p>

<p style="text-align: right;">Page 206</p> <p>1 MR. FOWLER: Well, we'll have to talk about 2 that. 3 MR. DAVIS: Okay. Okay. 4 BY MR. FOWLER: 5 Q. Counsel (sic), do you recall being shown 6 your disclosure in the conflicts of interest in the 7 article that you wrote? 8 A. Yes, I do. 9 Q. And why -- can you explain as a journal 10 editor why it's important to have that section on the 11 conflicts of interest? 12 A. The -- the real issue as a journal editor 13 that -- that you are trying to steer away from is the 14 lack of transparency. And so what you do is you ask 15 authors to disclose their conflicts on ownership, 16 remuneration, and certainly ownership, remuneration 17 instruments variables, payment that relate to or even 18 potentially could be related to the subject matter 19 that they are writing on. 20 Everything that is listed as a potential 21 conflict, it's not sitting there saying you're -- 22 you're creating some kind of damning of the -- of the 23 author. You are just simply saying, here are the 24 author's potential conflicts and it's an exercise in</p>	<p style="text-align: right;">Page 208</p> <p>1 documents and information that was important -- 2 important or relevant to your opinions? 3 A. Yeah, I looked over documents and -- and 4 all and a lot of the documents simply were not 5 directly relevant to me or sometimes they contained 6 information that I could pull for -- from elsewhere, 7 such as what the FDA did, for example, with NDMA in -- 8 in their -- in their testing. 9 Q. Do you believe you needed any information 10 or depositions or documents from any of the other 11 manufacturers in order to form your opinions in this 12 case? 13 A. No. I had plenty of information to make 14 the case that -- that I made about the level of 15 exposure and also in relationship to animal models and 16 what we see in humans and then look at the human 17 studies. 18 Q. Has counsel today shown you any document 19 from any other manufacturer reflecting the level of 20 NDMA in valsartan higher than the level that you 21 assumed in doing your calculations? 22 MR. DAVIS: Objection; leading. 23 BY THE WITNESS: 24 A. I -- I haven't seen in any FDA material</p>
<p style="text-align: right;">Page 207</p> <p>1 transparency that you are engaging in. 2 When you don't have that and you've got a 3 sizeable conflict, that's just not where you want to 4 be and that's not the expectation that any credible 5 journal would have. 6 MR. DAVIS: Steve, you are off camera again. 7 MR. FOWLER: Oh, I don't know what is happening 8 there. Hold on. I'm not even touching the thing, but 9 okay. 10 BY MR. FOWLER: 11 Q. Doctor, I'm asking you about the materials 12 considered list using what counsel had marked as 13 exhibit, I think it was 3. 14 Did -- did you have access to all of the 15 documents and information contained on Exhibit 3? 16 MR. DAVIS: Exhibit, for the record, that's 17 Exhibit 10 is the materials considered. 18 MR. FOWLER: Okay. Thank you, Counsel. 19 BY MR. FOWLER: 20 Q. On Exhibit 10 that counsel marked, did you 21 have access to all of that, those documents that were 22 provided to you? 23 A. I had access to them. 24 Q. Were you able to identify or select those</p>	<p style="text-align: right;">Page 209</p> <p>1 nor in any document produced today a level as high as 2 what I used in my calculations. 3 MR. FOWLER: All right. Thank you, Doctor. No 4 further questions. 5 FURTHER EXAMINATION 6 BY MR. DAVIS: 7 Q. Okay. Doctor, I just have a few 8 follow-ups. Let's -- let's start with this Fishbein 9 article that's in the Journal of Pharmacology & 10 Therapeutics. I believe that it's marked as maybe 11 Exhibit 13 (sic), but I'm not positive about that. 12 Had you reviewed this article prior to 13 being shown it today? 14 Doctor, did you -- did you get the 15 question or are we breaking up? 16 A. No, you are not breaking up. I'm just 17 looking. 18 No. 19 Q. Okay. Are you familiar that many journals 20 keep their own rules as to what needs to be disclosed 21 as to conflicts of interest? 22 MR. FOWLER: Objection; form, foundation. 23 BY THE WITNESS: 24 A. I've been an associate editor of three</p>

<p style="text-align: right;">Page 210</p> <p>1 journals and while the -- the disclosures may vary 2 some, there -- there would never be an instance where 3 you would get a half a million dollars on a subject 4 that you wrote an article for from an entity and then 5 not disclose that payment. There is -- there is no 6 journal around that would do that. I'm also on the 7 American College of Physician Board of Regents, I can 8 tell you extensively what the Journal of the Annals of 9 Internal Medicine does, and if something like that 10 came to knowledge there, it -- Christine Lang would 11 bring it to the board and -- and all and it would not 12 be something that was just overlooked. 13 BY MR. DAVIS: 14 Q. Have you specifically reviewed the 15 conflicts of interest disclosure rules that are 16 maintained by the Journal of Pharmacology & 17 Therapeutics where this article was published? 18 A. I have not specifically reviewed those, 19 but I will again state that there is no ethical 20 journal committed to transparency that would allow a 21 half a million dollar payment on a subject that you 22 are writing an article for not to be disclosed. 23 Q. But that's without having actually 24 reviewed the disclosure rules by this particular</p>	<p style="text-align: right;">Page 212</p> <p>1 MR. FOWLER: Well, objection to the colloquy for 2 the 15th time today. 3 BY MR. DAVIS: 4 Q. When did you learn that your report would 5 not just apply to Teva but to other defendants? 6 MR. FOWLER: Objection; form, to the extent you 7 are calling for attorney/client privilege. 8 BY MR. DAVIS: 9 Q. I'm asking a -- 10 A. Sometime -- 11 Q. -- a when, not a -- 12 A. Sometime after my engagement with Teva. 13 Q. So that could include any time from your 14 engagement up through today? 15 MR. FOWLER: Objection; form. 16 BY THE WITNESS: 17 A. Oh, I knew well before today that it's 18 sometime, and I don't remember the exact date, but 19 I -- I understood that. 20 BY MR. DAVIS: 21 Q. You -- you understood that after meeting 22 with 20 minutes with your counsel to discuss your 23 redirect? 24 MR. FOWLER: Objection; form, argumentative,</p>
<p style="text-align: right;">Page 211</p> <p>1 journal, correct? 2 A. What you are really trying to minimize is 3 the fact that I have been an associate editor for 4 three journals and have written a couple hundred 5 publications and am intimately familiar with Annals of 6 Internal Medicine which is one of the best journals of 7 the world because I sit on the American College of 8 Physicians board, and there is no wiggle room in 9 differences in how journals require disclosure that 10 would excuse that, none. 11 Q. But that's speculation because you have -- 12 as you have testified, you haven't actually reviewed 13 this journal's rules, which are what govern 14 disclosures in this journal, correct? 15 A. So my speculation based on my experience 16 is -- is pretty sound and there -- there is -- there 17 is not a journal, and I doubt you reviewed it either, 18 there is not a journal that I have ever had any 19 association with, and I've been to conferences about 20 this, I have listened to editorial discussions, this 21 violates the spirit of transparency and disclosure, 22 and trying to defend this is shameful. 23 Q. Thank you for that commentary. I'm going 24 to for the second time move to strike something today.</p>	<p style="text-align: right;">Page 213</p> <p>1 mischaracterizing. 2 BY THE WITNESS: 3 A. I don't think that's what I said, and you 4 are deliberately twisting and actually distorting what 5 I said. That is not what I said. 6 BY MR. DAVIS: 7 Q. You mentioned that there appears to be a 8 linkage for kidney -- this is Section III.O of your 9 report, you were asked some questions, and I believe 10 gave an answer indicating that the linkage between 11 kidney cancer increased as blood pressure levels 12 increased. 13 Is that -- was that your testimony? 14 MR. FOWLER: Objection; form, mischaracterizing. 15 BY THE WITNESS: 16 A. There is a statement in the paper that 17 says unlike many cancers, something to that effect, 18 there is a direct relationship between the risk of 19 kidney cancer and blood pressure level. 20 BY MR. DAVIS: 21 Q. In your practice of treating 22 hypertensives, are your uncontrolled patients under a 23 greater degree of medical surveillance than your 24 controlled hypertension patients?</p>

<p style="text-align: right;">Page 214</p> <p>1 A. Our practice in -- and, again, it follows 2 the evidence and -- and recommendations which are 3 based on evidence to the degree we agree with it, at 4 the end of the day your patients are under 5 surveillance for their general health, and if we have 6 hypertensive patients who are controlled or 7 uncontrolled, we -- we really have a fairly similar 8 way of -- of surveilling them and their health risk 9 are both cardiovascular and non-cardiovascular. 10 Q. So is the answer to my -- my question 11 that, yes, your uncontrolled hypertension patients are 12 indeed under a greater degree of medical surveillance 13 than your controlled ones? 14 MR. FOWLER: Objection; form. 15 BY THE WITNESS: 16 A. Actually, there is nothing in the answer I 17 just gave you that would lead you to say that. So my 18 hypertensive patients who are controlled and 19 uncontrolled essentially get the same surveillance. 20 BY MR. DAVIS: 21 Q. You don't -- you don't make a point to 22 schedule more diagnostic tests, more appointments with 23 patients who are not under control in terms of their 24 blood pressure levels than you do your patients that</p>	<p style="text-align: right;">Page 216</p> <p>1 So I'm a pretty good doctor, and I don't 2 do stuff like that just to practice defensive 3 medicine. 4 Q. But, Doctor, I'm not asking you about 5 kidney cancer right now. I'm asking you about how you 6 treat your uncontrolled hypertension patients versus 7 your controlled ones. 8 And my question is: To a general -- as a 9 general principle, are you placing your uncontrolled 10 hypertension patients under a greater degree of 11 medical surveillance than you are someone who is on 12 therapy and with -- has blood pressure levels within 13 acceptable levels? 14 A. Counselor, I have answered that question 15 now a couple of times. Patients often switch back and 16 forth between controlled and uncontrolled. And I've 17 already answered that question and told you no. 18 Q. Okay. The list of supplemental materials 19 that you reviewed that I don't have, so, you know, I'm 20 going to reserve all rights to raise more questions 21 about that at a certain point if -- if it's true that 22 that wasn't sent to me, how -- what's -- what's 23 generally on that list? Can you -- can you tell me 24 what's on the list?</p>
<p style="text-align: right;">Page 215</p> <p>1 are within acceptable ranges? 2 A. So let me explain to you what you are 3 asking and why you are barking up the wrong tree. 4 No. 1, when you start looking and doing a 5 bunch of testing for something that is very low 6 prevalence, it's a fact that most of the positive 7 tests you get are going to be false positives because 8 the prevalence of the disease is low. That's the 9 problem you run into screening for pheochromocytoma. 10 And that is a problem that you are going to run into 11 for screening for kidney cancer. If I took all of my 12 uncontrolled patients and ordered CAT scans on them, 13 looking at their kidneys or did invasive testing and 14 all, I would be a wasteful doctor, I would not only be 15 wasteful, but I would be finding things that people 16 would be following up on and cause harm to the 17 patient. So no, on something very low prevalence, 18 just because there is an increased risk, it doesn't 19 mean that because it's probably at the bottom of the 20 potential things you are going to find that you go and 21 do a bunch of testing. And that's based on solid 22 epidemiologic principles. You can't really start 23 looking for low prevalence diseases because most of 24 your positive tests are going to be false positives.</p>	<p style="text-align: right;">Page 217</p> <p>1 MR. FOWLER: Objection; form, super broad and 2 the list speaks for itself. 3 MR. DAVIS: Well, I have no choice, Steve, I 4 don't have the document, so I'm going to start with 5 some general questions. 6 BY MR. DAVIS: 7 Q. Dr. Flack, do you know generally what's -- 8 what's on that list of materials considered that's 9 supplemental? 10 MR. FOWLER: That's a different question. 11 THE WITNESS: What's this? 12 MR. FOWLER: That's not the supplemental. 13 THE WITNESS: Is this the stuff that was sent 14 yesterday? 15 MR. FOWLER: That's -- that's -- that's the 16 original. 17 THE WITNESS: Was this the stuff that was sent 18 yesterday? 19 MR. FOWLER: In part. I -- I don't -- I can't 20 help you out, but it -- I mean, the differences speak 21 for themselves. 22 BY THE WITNESS: 23 A. It is probably some stuff you got with 24 regards to sheets that were marked up for me and --</p>

<p style="text-align: right;">Page 218</p> <p>1 and all. That's what I -- I know about.</p> <p>2 MR. DAVIS: Okay. Well, okay. Since it appears</p> <p>3 I can't get any specific answers on it, I'm going to</p> <p>4 reserve my rights on that.</p> <p>5 BY MR. DAVIS:</p> <p>6 Q. Doctor, did you -- did you write an</p> <p>7 editorial recently suggesting that ARBs can help with</p> <p>8 COVID in some way?</p> <p>9 A. That would be a mischaracterization of the</p> <p>10 editorial, because we don't know about that and there</p> <p>11 are people who have been on both sides of this fence</p> <p>12 who think that, you know, it could be harmful,</p> <p>13 potentially helpful, and we just don't have good -- a</p> <p>14 good understanding of that.</p> <p>15 Q. But you're familiar with the editorial I'm</p> <p>16 talking about?</p> <p>17 A. Correct.</p> <p>18 Q. Okay. Why was that not disclosed on your</p> <p>19 CV?</p> <p>20 A. My -- my disclosure for the American</p> <p>21 Journal of Hypertension certainly has been disclosed</p> <p>22 and if the editorial is not on my CV, it's just an</p> <p>23 oversight because it should be on my CV.</p> <p>24 Q. Did you disclose the work you've done in</p>	<p style="text-align: right;">Page 220</p> <p>1 to me today.</p> <p>2 MR. FOWLER: No objection.</p> <p>3 (WHEREUPON, a certain document was</p> <p>4 marked Plaintiff-Flack Deposition</p> <p>5 Exhibit No. 15, for identification,</p> <p>6 as of 09/28/2021.)</p> <p>7 MR. DAVIS: That's marked as Plaintiff-Flack 14</p> <p>8 (sic).</p> <p>9 MR. FOWLER: I think it would have to be 15,</p> <p>10 right?</p> <p>11 MR. DAVIS: Or, yeah, I guess we'll -- after</p> <p>12 this is over we can have a discussion with the court</p> <p>13 reporter.</p> <p>14 MR. FOWLER: Sure.</p> <p>15 BY MR. DAVIS:</p> <p>16 Q. Let me publish real fast -- I'm publishing</p> <p>17 what at present is marked as Plaintiffs-Exhibit 14</p> <p>18 (sic).</p> <p>19 This is your supplemental invoice that</p> <p>20 documents work through September 7th, between</p> <p>21 July 21st and September 7th, correct?</p> <p>22 A. Correct.</p> <p>23 Q. And do you see that the amount due there</p> <p>24 is \$7800?</p>
<p style="text-align: right;">Page 219</p> <p>1 this case that you contend would be a conflict of</p> <p>2 interest worthy of disclosure in that editorial?</p> <p>3 MR. FOWLER: Objection; form.</p> <p>4 BY THE WITNESS:</p> <p>5 A. Well, Counselor, you haven't done your</p> <p>6 homework. The article -- the editorial that I wrote</p> <p>7 with Ernesto Shiff, one of the other editorial</p> <p>8 coauthors, well annotated any work that I -- I did</p> <p>9 here. So it's really hard for me to preemptively list</p> <p>10 a disclosure when you are talking about a timeframe</p> <p>11 that began -- was well before I ever was engaged on</p> <p>12 this.</p> <p>13 BY MR. DAVIS:</p> <p>14 Q. Okay. But nonetheless, that -- that</p> <p>15 editorial is not disclosed in your CV, correct?</p> <p>16 MR. FOWLER: Objection; form, disclosed.</p> <p>17 BY THE WITNESS:</p> <p>18 A. If the editorial is not on my CV,</p> <p>19 certainly it is just an oversight. It is in the</p> <p>20 public record and really has -- has no direct bearing</p> <p>21 on this case.</p> <p>22 BY MR. DAVIS:</p> <p>23 Q. Just one final housekeeping matter. I'm</p> <p>24 going to mark the supplemental invoice that was sent</p>	<p style="text-align: right;">Page 221</p> <p>1 A. For the amount of work I did, correct.</p> <p>2 Q. And do you see that the description of</p> <p>3 services is almost verbatim the description of</p> <p>4 services from your first invoice?</p> <p>5 A. It is a continuation of what I've been</p> <p>6 doing.</p> <p>7 Q. Okay.</p> <p>8 A. So it should be.</p> <p>9 Q. How many hours would you estimate between</p> <p>10 September 7th and today that you have accumulated?</p> <p>11 A. Probably about 14 or 15.</p> <p>12 Q. Was your method in this -- for these</p> <p>13 13 hours that are listed here, was your method of</p> <p>14 tabulating them the same way as it was in the first</p> <p>15 invoice, which is namely you testified your memory and</p> <p>16 maybe some sticky notes?</p> <p>17 A. I didn't testify memory and maybe sticky</p> <p>18 notes. I testified my memory and sticky notes, and</p> <p>19 there has been no change in how I -- I count the</p> <p>20 hours.</p> <p>21 Q. Okay. And do you have those sticky notes?</p> <p>22 A. No, I do not.</p> <p>23 Q. In your possession?</p> <p>24 A. No.</p>

<p>Page 222</p> <p>1 Q. Okay. What -- what happened to them?</p> <p>2 A. I don't know.</p> <p>3 Q. You threw them out?</p> <p>4 A. Maybe somebody took them off of my</p> <p>5 computer, I don't know, maybe the janitor ate them. I</p> <p>6 don't have them.</p> <p>7 Q. Did you look for them?</p> <p>8 A. Why would I look for them?</p> <p>9 Q. Because they are responsive to the notice</p> <p>10 we served on you.</p> <p>11 MR. FOWLER: Objection; form, argumentative.</p> <p>12 BY THE WITNESS:</p> <p>13 A. I told you how I tabulated. They may be</p> <p>14 on my computer, they may be not and -- and all, but I</p> <p>15 have it in my head, because I haven't really done that</p> <p>16 much and I kept a running -- a running tabulation on</p> <p>17 it, so.</p> <p>18 MR. DAVIS: Okay. I'm going to formally request</p> <p>19 that those notes be searched for, Counsel. They</p> <p>20 are -- they are responsive, and it's -- it doesn't</p> <p>21 appear that he is aware of whether they exist or not,</p> <p>22 so I'm -- I'm going to request that those be searched</p> <p>23 for. And that -- that concludes my I suppose recross,</p> <p>24 Doctor. Thank you.</p> <p>Page 223</p> <p>1 MR. FOWLER: Thank you, Counsel. Nothing</p> <p>2 further. I think that's a wrap. Thanks everybody.</p> <p>3 MR. DAVIS: Thank you.</p> <p>4 THE VIDEOGRAPHER: The time is 3:14 p m. We are</p> <p>5 off the record.</p> <p>6 ---</p> <p>7 Thereupon, at 3:14 p.m., on Tuesday,</p> <p>8 September 28, 2021, the deposition was concluded.</p> <p>9 ---</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p>	<p>Page 224</p> <p>1 REPORTER'S CERTIFICATE</p> <p>2</p> <p>3 I, JULIANA F. ZAJICEK, a Registered</p> <p>4 Professional Reporter and Certified Shorthand</p> <p>5 Reporter, do hereby certify that prior to the</p> <p>6 commencement of the examination of the witness herein,</p> <p>7 the witness was duly remotely sworn by me to testify</p> <p>8 to the truth, the whole truth and nothing but the</p> <p>9 truth.</p> <p>10 I DO FURTHER CERTIFY that the foregoing is</p> <p>11 a verbatim transcript of the testimony as taken</p> <p>12 stenographically by me at the time, place and on the</p> <p>13 date hereinbefore set forth, to the best of my</p> <p>14 availability.</p> <p>15 I DO FURTHER CERTIFY that I am neither a</p> <p>16 relative nor employee nor attorney nor counsel of any</p> <p>17 of the parties to this action, and that I am neither a</p> <p>18 relative nor employee of such attorney or counsel, and</p> <p>19 that I am not interested directly or indirectly in the</p> <p>20 outcome of this action.</p> <p>21 IN WITNESS WHEREOF, I do hereunto set my</p> <p>22 hand on this 4th day of October, 2021.</p> <p>23</p> <p>24 JULIANA F. ZAJICEK, Certified Reporter</p> <p>Page 225</p> <p>1 DEPOSITION ERRATA SHEET</p> <p>2</p> <p>3</p> <p>4 Case Caption: In Re: Valsartan, Losartan, and</p> <p>5 Irbesartan Products Liability Litigation</p> <p>6</p> <p>7 DECLARATION UNDER PENALTY OF PERJURY</p> <p>8</p> <p>9 I declare under penalty of perjury that I</p> <p>10 have read the entire transcript of my Deposition taken</p> <p>11 in the captioned matter or the same has been read to</p> <p>12 me, and the same is true and accurate, save and except</p> <p>13 for changes and/or corrections, if any, as indicated</p> <p>14 by me on the DEPOSITION ERRATA SHEET hereof, with the</p> <p>15 understanding that I offer these changes as if still</p> <p>16 under oath.</p> <p>17</p> <p>18 JOHN M. FLACK, MD, MPH, FAHA, MACP, FASH</p> <p>19</p> <p>20 SUBSCRIBED AND SWORN TO</p> <p>21 before me this day</p> <p>22 of , A.D. 20__.</p> <p>23</p> <p>24 Notary Public</p>
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>Page 226</p> <p>1 DEPOSITION ERRATA SHEET</p> <p>2 Page No. _____ Line No. _____ Change to: _____</p> <p>3 _____</p> <p>4 Reason for change: _____</p> <p>5 Page No. _____ Line No. _____ Change to: _____</p> <p>6 _____</p> <p>7 Reason for change: _____</p> <p>8 Page No. _____ Line No. _____ Change to: _____</p> <p>9 _____</p> <p>10 Reason for change: _____</p> <p>11 Page No. _____ Line No. _____ Change to: _____</p> <p>12 _____</p> <p>13 Reason for change: _____</p> <p>14 Page No. _____ Line No. _____ Change to: _____</p> <p>15 _____</p> <p>16 Reason for change: _____</p> <p>17 Page No. _____ Line No. _____ Change to: _____</p> <p>18 _____</p> <p>19 Reason for change: _____</p> <p>20 Page No. _____ Line No. _____ Change to: _____</p> <p>21 _____</p> <p>22 Reason for change: _____</p> <p>23 SIGNATURE: _____ DATE: _____</p> <p>24 JOHN M. FLACK, MD, MPH, FAHA, MACP, FASH</p>	
<p>Page 227</p> <p>1 DEPOSITION ERRATA SHEET</p> <p>2 Page No. _____ Line No. _____ Change to: _____</p> <p>3 _____</p> <p>4 Reason for change: _____</p> <p>5 Page No. _____ Line No. _____ Change to: _____</p> <p>6 _____</p> <p>7 Reason for change: _____</p> <p>8 Page No. _____ Line No. _____ Change to: _____</p> <p>9 _____</p> <p>10 Reason for change: _____</p> <p>11 Page No. _____ Line No. _____ Change to: _____</p> <p>12 _____</p> <p>13 Reason for change: _____</p> <p>14 Page No. _____ Line No. _____ Change to: _____</p> <p>15 _____</p> <p>16 Reason for change: _____</p> <p>17 Page No. _____ Line No. _____ Change to: _____</p> <p>18 _____</p> <p>19 Reason for change: _____</p> <p>20 Page No. _____ Line No. _____ Change to: _____</p> <p>21 _____</p> <p>22 Reason for change: _____</p> <p>23 SIGNATURE: _____ DATE: _____</p> <p>24 JOHN M. FLACK, MD, MPH, FAHA, MACP, FASH</p>	

<u>WORD</u> <u>INDEX</u>				
< \$ >	189:21	1700 3:14	2015 63:3, 17,	28202 3:19
\$10,000 99:24	207:17, 20	187 7:7	21	2875 1:4
100:20	10:12 58:21,	19102 3:9	202 9:8	28th 1:16
\$100 8:8	24	192 9:5	2020 8:4 85:1	10:3 60:16
\$210,000	10:24 58:24	19-2875 1:5	2021 1:12, 16	29 75:23
71:22	59:1	193 9:8	7:17, 18 9:13	2nd 49:13, 23
\$25,000 74:18	100 2:4 4:21	194 106:9, 11,	10:4 22:15	51:5 55:17
\$26,100 51:1	5:5 81:11	13, 22	49:14 60:16	< 3 >
\$42,000 76:1	155:10, 11	19422 5:11	223:8 224:22	3 7:19 25:16
\$512,000 74:7	1000 4:16	1978 61:13	202-452-7318	34:17 49:3, 6
\$512,733 74:8	101 8:13	62:15	3:15	71:17 73:24
\$53,000 75:18	103 2:20	1986 68:6, 19	202-530-8587	83:2 85:11
\$600 51:1	10-milligram	1988 62:15	4:17	118:12
\$678 8:5 85:4	189:21	1990s 69:2	209 7:8	127:16, 19
\$760,000	11 4:5 9:3	180:7	20th 20:10, 15	207:13, 15
76:14	16:10 43:21	1997 63:3	21:12 23:7, 8	3/29/06 8:11
\$7800 220:24	123:6 157:9,	1st 22:21	50:16, 21	3:14 223:4, 7
< 0 >	12 192:4	85:1	51:1 92:15	30 163:18
02109 5:22	11:47 131:2	< 2 >	21 7:18 9:13	300 3:14
02110-1724	11:57 130:23	2 7:17 8:17	210 56:20	30305 4:12
5:6	110 198:2	22:5, 9 25:15	106:16, 17	31 131:23
070 8:13	1100 3:9	30:12 43:9	2101 4:16	144:23 145:22
07068 2:20	117 8:19	86:16 87:23	214 106:23	317-231-6491
07102 4:21	12 9:5 24:24	98:24	107:1, 12, 23	4:6
09/28/2021	44:8 128:19	2:00 183:17	108:15 109:4	31c 157:4
13:17 22:10	129:6 192:16,	2:23 183:17,	21st 23:8	320-milligram
49:7 60:2	20, 24 193:3	18	220:21	167:2, 4
84:15 90:4	194:8 202:20	20 7:17	22 7:17	189:20
96:2 101:18	12:53 131:2, 3	22:15 106:12,	194:12, 15	33 76:6, 16
117:6 124:4	124 8:22	22 129:17, 23	220 9:11	3333 4:11
157:13 193:1,	13 7:14 9:8	194:12, 15	227 3:18	33950 3:5
20 202:4	129:6, 17	212:22 225:22	23 70:23	34 71:4 106:8
220:6	193:11, 19	20.1 189:17	71:4 157:3	37 203:18
< 1 >	202:18, 21	191:7	24 157:4	39 76:16
1 7:14 8:4	209:11 221:13	20.1-	203:18	146:15 183:23
13:4, 16 18:6	14 9:8 201:5,	microgram	24.1 189:17	< 4 >
25:3, 11 43:5	24 202:3	190:11	2400 5:5	4 7:19 36:5
100:11 178:7	220:7, 17	200 4:11	25 149:17	59:22 60:1
189:16 215:4	221:11	20006-3807	197:15	106:6 127:19
1:11-cv-71	15 9:11	3:14	2500 4:11	128:13, 18
90:9	75:24 220:5,	2002 85:14	26 35:6	188:15
1:53 131:4	9 221:11	20037 4:16	47:17 48:19	4/12/06 8:10
10 7:6 8:22	150 90:16	2006 91:6	51:7 73:23	40 93:15
42:17 43:14	1515 3:9	96:16 97:16	26(a)(2)(B)(1	163:18
123:6, 24	15219 5:17	98:24 99:11	47:22	412-263-1840
124:3 138:6	157 9:3	2008 68:2	260 2:14	5:17
	15th 4:21	2010 68:2	267-535-1300	43 20:9, 16
	212:2	80:21	3:10	21:12, 13, 23
	160 189:21	2011 85:14	27th 5:21	
	17 114:13	2014 173:14	28 1:12 223:8	

23:13 24:8 28:7 50:6 4420 11:4 45 130:21 450 5:11 46204-3535 4:5 48 194:10 49 7:19 4th 224:22 < 5 > 5 8:3 38:11 74:11 75:17 84:10, 14 50 106:9 504-524-5777 2:10 512-795-8686 2:5 53 5:21 < 6 > 6 8:10 17:1, 18 38:20 39:23 40:2, 11, 12 89:24 90:3 103:13 60 7:19 600 3:18 6001 2:4 610-567-0700 5:12 617-213-7045 5:22 62711 11:5 66210 2:15 678-553-2100 4:12 < 7 > 7 8:11 9:13 11:2 41:1 95:22 96:1, 6 118:12 157:20 70 198:2 701 2:9 11:3 70130 2:9 704-444-3475 3:19 78746 2:5	7th 220:20, 21 221:10 < 8 > 8 8:13 41:20 101:14, 17 800-701-3672 2:15 8101 2:14 82 61:14, 15 84 8:3 85 61:15 857-488-4267 5:6 86 61:15, 16 877.370.3377 1:23 88 61:16 62:18 < 9 > 9 8:19 42:6, 9 117:2, 5 131:16 9:09 1:15 10:4 90 8:10 917.591.5672 1:23 94 62:19 941-639-1158 3:5 95 123:17 96 8:11 973-228-9898 2:21 973-757-1017 4:22 99 3:4 < A > A.D 225:22 a.m 1:16 10:4 58:21, 24 59:1 130:23 abandon 53:23 abandoned 75:15 ability 110:20 118:22	138:19 148:10 152:12 158:16 182:6 able 13:19 78:17 93:13 100:18 118:15 129:1 132:13 160:22 172:16 182:16 194:2, 24 203:5 207:24 absence 163:1 185:12, 13 Absolutely 65:16 104:19 143:8 155:1 159:3 161:4 173:5 academic 79:24 80:2, 7 ACC/AHA 199:18 accept 87:14 93:13 141:23 acceptable 86:23 135:1 165:21 167:24 168:5, 7 169:6 170:13 215:1 216:13 acceptance 161:13 accepted 108:6 161:18 access 173:22 207:14, 21, 23 accidental 73:4 accidentally 199:13 accommodatio n 202:9 accomplished 51:6, 10 account 157:24	accumulated 221:10 accuracy 54:16, 19 accurate 19:16, 19 77:18 106:2, 4 133:9 159:23 225:12 accurately 24:9 ACE 104:11 113:15 acquiring 48:10 act 133:13 ACTAVIS 4:9 Acting 8:5 action 224:17, 20 active 70:24 71:1, 10 activity 107:17 108:8 199:4 actual 51:22 53:11 115:12 120:24 172:19 197:21 198:21 ad 69:18, 21 175:4 ADAM 2:21 add 106:22 163:6 164:5, 8 165:14 added 197:10 address 11:2, 4 122:15 128:8 162:9 addressed 107:2, 13, 24 110:9 addresses 11:1 adequately 145:21 adhere 118:10 adherent 156:13	Administration 175:18 admissibility 130:3 admit 147:18 adults 119:6, 11 Advances 8:19 advantage 174:21 adverse 176:21 177:16, 21 179:10 advisable 121:6 advisers 87:13 advisory 65:18, 19 69:5, 6, 7, 11, 17, 18, 20, 22, 23 70:6, 14, 16 175:5 African 70:1 97:18, 20 98:5, 6 99:3 AG 102:18 agencies 133:17, 21 190:6 aggregate 186:16 ago 24:21 69:24 80:10, 19 91:8 agree 35:11 55:24 65:12 104:3, 8 115:15 138:5 143:12, 23 154:9 155:18 214:3 agreed 89:14 AHA 64:3 ahead 22:4 32:6 49:2 79:10 105:4 133:1 140:14 AID 4:3
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

al 8:18, 22 9:5, 11 ALBERTSON' S 3:11 alcohol 88:4, 19 alcohols 88:13 aldosteronism 114:17, 19 ALFANO 5:13 aliskiren 74:16, 24 allegation 89:1 allege 132:4 alleged 85:14 allow 113:3 123:15 210:20 alluded 182:15 alternative 120:5 178:4 180:16 182:17 Altitude 74:15 altogether 80:7 Amended 7:14 American 63:24 64:2, 4, 5 66:12 97:18, 20 98:5, 6 99:3 210:7 211:7 218:20 Americans 70:1 Amgen 69:24 70:7 amlodipine 8:16 103:5, 6, 21, 22, 24 amlodipine/vals artan 8:16 amount 74:7, 19 76:13 83:11 100:13, 16 113:22 116:5 135:5, 14 139:2, 3, 21 163:14 164:13 205:4 220:23 221:1	amounts 93:13 132:3, 21, 22 133:19 134:3, 24 145:6 146:24 163:11 200:14 analog 26:13 analyses 171:8 analysis 110:24 166:21 172:10, 15 174:1, 14 188:16 analyze 114:10 and/or 105:19 163:1 225:13 animal 78:19 138:20 139:21, 22 141:9 145:16 146:21 163:19 167:7, 9 208:15 animals 139:3, 8, 24 143:7, 15, 19 185:23 Anna 9:11 201:10 Annals 210:8 211:5 annotated 219:8 Announces 8:5 announcing 85:3 answer 11:23 12:14, 17 17:14 20:24 21:3, 11 24:3 27:11, 20 28:20 29:14, 19, 24 30:5 37:1, 12 38:4, 6, 11, 17 39:18 41:21 42:2 43:24 51:20 57:16 89:3 100:5 108:23 109:13	117:23 129:16, 21 135:11 137:6 139:15, 18 140:6, 9 141:13, 14, 16, 19 142:2, 3, 9, 15, 19 146:4 150:1 151:16 152:1 157:7 164:11 181:22 186:13 191:18 200:2 213:10 214:10, 16 answered 20:21 21:5, 6, 16 23:17, 19 24:1 29:1 33:20 37:18 81:8 82:4 86:1, 10 99:13 117:24 128:4 141:7 152:1 165:16 216:14, 17 answers 42:15 218:3 antagonize 111:23 antihypertensiv e 198:3 anybody 44:4 100:12, 20 127:2 173:20 178:21 179:1 180:1 anyway 95:20 apologies 71:8 92:10 103:10 186:10 apologize 131:10 apparently 163:3 appear 39:20 49:13 117:10 132:19 177:14 222:21	APPEARED 2:1 3:1 4:1 5:1 16:12 appears 20:9 26:9 32:1 34:24 42:6, 21 100:23 102:2 103:17 162:15 171:12 183:23 198:13 213:7 218:2 APPEL 5:7 applicable 162:11 application 195:20 applied 119:20 120:3, 4, 12 121:19 136:4 applies 187:18 188:4, 10 apply 121:2, 13 187:19, 20 191:15 212:5 appointments 156:6 214:22 appreciate 181:1 202:8 approach 67:4 82:10 86:20 92:22 approached 163:18 appropriate 136:5 180:15 182:17 approval 70:4 approved 161:14 approximate 60:17 Approximately 23:11 25:1 71:22 April 91:6 97:16 98:24	99:11 ARB 43:18 arbitrary 136:4 ARBs 34:21 41:3, 9 42:20 178:8, 11 179:3 218:7 area 78:10 79:1 97:15 99:10 110:14 116:2, 21 136:18 137:16 166:9 168:20 areas 66:7 176:7 186:17 argument 163:21 165:24 166:1 argumentative 33:7 82:3 99:14 177:19 212:24 222:11 arguments 130:3 arrange 92:21 arrangements 83:21 arrive 20:17 23:15 129:7 189:2 arrived 51:16 124:24 190:7 arsenic 165:20, 21 168:8 169:24 170:14 Article 8:15 9:3, 8 48:19 101:21 102:2, 4 117:8, 18 118:12 156:19, 23 157:14 160:10 161:12, 14, 17 201:4, 7 204:2, 10, 16, 17 205:6, 11 206:7 209:9,
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

12 210:4, 17, 22 219:6 articles 14:11 15:5 25:24 26:7, 11, 22 27:7, 21 29:6, 7, 16 30:1 31:2, 3 32:11 36:6, 11 38:12 106:11, 18, 20 108:15 109:5, 9, 10, 17 110:1, 9 114:22 124:13 125:10 150:12 161:15 171:11, 13 articulate 52:17 ashamed 100:11, 21 ASHLEY 3:15 ashley.jones@b ipc.com 3:16 aside 186:24 Asked 21:15 23:16 24:1 30:23 33:20 51:12 81:8 82:4 83:16 85:24 86:9 99:9, 13 128:3, 8 141:6 165:15 168:6 176:9 195:9 197:17 200:2, 5, 8 202:19 203:21 213:9 asking 18:7 31:14, 15 40:1, 13 43:1 45:12 55:3 72:21 100:10 121:13 132:18, 20 142:5 159:5 164:17 184:10 196:8,	10 201:19 207:11 212:9 215:3 216:4, 5 aslater@mazies later.com 2:22 assess 200:17 assessment 137:11, 20 145:8 assessments 199:11 assignment 51:6 60:20 115:15 176:4, 6 assimilate 26:17 assimilating 48:9 assist 14:1 17:10 102:13 assistants 197:4 associate 56:20 160:14 161:16 209:24 211:3 Association 9:3 64:4 66:13 107:11 109:5 145:6 148:21 149:15, 20 150:15, 17 211:19 associations 110:21 158:1 assume 49:9 assumed 208:21 assumption 167:3 189:19, 23 assumptions 189:14 191:12 assure 33:10 AstraZeneca 77:5 105:21 ate 222:5 Atlanta 4:12 97:15 99:10	attached 158:19 attachment 55:22 attachments 38:14 39:12 40:20, 21 44:12 attempting 148:16 attention 90:7 127:14 131:21 188:13 197:14 Attorney 8:5 87:24 94:23 95:1 224:16, 18 attorney/client 212:7 attorneys 45:17 Attorney's 8:3 Augmentation 74:1 augmented 167:1 189:14 August 49:13, 23 51:5 55:16 AUROBINDO 5:9 AUROLIFE 5:9 Austin 2:5 author 102:1, 3 204:2 206:23 authored 204:17 authority 137:11 authors 157:22 160:9, 13, 15 206:15 author's 158:21 159:2 206:24 automatically 169:1 availability 224:14	available 56:16 57:4, 17, 20 128:14 138:7 146:20 147:13 160:10 Aventis 77:19 average 155:20 189:18, 22 avoid 121:7 awarded 196:20 aware 36:2 39:9, 18 40:3, 17 42:5, 10, 11 43:16 85:8 89:13 93:21 135:15 136:21 138:13 139:12 140:6 141:14, 19, 22 142:10, 22, 24 143:1, 4 144:12 167:17 169:12, 16 205:2 222:21 awfully 175:6, 7 182:19 < B > back 16:6 20:17 23:14 24:7 25:2 27:2 50:1 68:19 79:3 87:23 95:4, 12 105:10 106:5 131:6 144:23 156:4 161:20 173:14 179:6, 19, 24 180:7 203:23 216:15 backed 75:2, 14 background 61:7 backup 19:9	backwards 56:21 bad 28:15 75:1 173:7 194:13 balance 161:23 balanced 95:5 barking 84:7 132:15 215:3 BARNES 4:3 8:13 barring 148:6 base 97:22 based 47:11 52:11 82:21 114:23 115:17 122:18 147:13 150:11, 14 151:12 153:12 165:18 186:20 189:1 190:15 211:15 214:3 215:21 basic 112:15 144:19 basically 26:17 31:1 72:10 83:2 95:12 105:10 111:13 120:18 134:18 153:15 160:17 171:3 180:20 185:6 199:19 200:13 basis 48:1, 16 52:17 155:11 163:20 175:4 Bear 13:8, 9 96:4 199:23 bearing 219:20 beat 104:15 201:15
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Beaumont 75:21	bibliographies 15:5 124:12	book 106:12, 18, 20	broker 82:8	108:1, 12, 16
Beecham 77:16	bibliography 14:10 106:8	booked 91:20	Bruce 201:10	109:6, 10, 12,
began 219:11	117:9	borrow 132:10	BUCHANAN 3:11, 18	21 110:5, 10
beginning 13:3 18:4 167:15	biggest 180:16	BOSICK 5:13	Buhnerkempe 111:21	116:7, 8
begins 197:18	billed 51:1	Boston 5:6, 22	bunch 123:7	123:7 138:20,
BEHALF 2:3 3:3, 11 4:3, 7 5:3, 9, 13, 20	biologic 148:19	bottom 70:23 90:19 134:17, 20 179:6 215:19	bureau 65:20 80:17, 18, 24 81:3 87:5 88:12	21 139:22
believe 13:8 20:10 21:23 43:21 69:9 80:20 106:6 186:19 188:14 192:3 202:12 208:9 209:10 213:9	bit 41:8 79:5 103:11 115:12 131:9 167:15 175:9	Boulevard 2:14	bureaus 65:20 66:1, 2, 3, 9 67:24 68:5, 9 70:14	140:21 142:5 143:7, 21 145:2, 7 147:2 148:14, 17, 20 149:2, 16, 18, 20
believed 55:10	black 8:17	Bowman 62:23	burning 74:16	150:4, 5, 6, 16, 17 151:3, 5, 11 152:22, 24 154:12, 20, 21 158:4 160:3, 12 162:19
Bell 5:11	bladder 153:1	box 139:20	business 72:22	163:20 164:1, 7, 14, 22, 24 165:1, 13
bellwether 56:4, 5 129:17	blasted 121:16, 21	BP 103:22 197:18 198:21	buttness 195:22	167:12 177:2, 10, 12 178:1, 19 179:15
belt 97:22	bleed 154:23	break 18:21 58:15 65:10 130:17 183:9	< C >	180:9 181:7 184:15, 18 185:23
beneath 139:1	blocker 104:11, 13 105:7	breakfast 92:15	calcium 104:11, 13	190:16, 18, 23 197:16 198:7, 10, 17, 20, 24 199:7 200:7, 9, 10, 16
benefit 123:2	blockers 113:15 180:8	breaking 130:15 209:15, 16	105:7 113:14 180:8	201:2 213:11, 19 215:11 216:5
benefits 34:21	blood 9:3 105:5 111:24 150:3 151:7 152:18, 20, 23 153:9 154:12, 22 163:2 197:22 198:1, 8, 15 213:11, 19 214:24 216:12	BRETT 2:17	calculated 167:5	cancers 116:8 132:4 139:8 143:7 149:2 150:5 162:23 184:20
benign 154:3, 4	board 63:22, 23, 24 64:7, 13, 15 69:22, 23 70:6, 16 82:24 84:3 88:20 210:7, 11 211:8	brett@hollisla wfirm.com 2:17	calculations 208:21 209:2	198:13, 16 199:3 213:17
best 148:9 162:21 165:19 176:8 200:13 211:6 224:13	boards 65:18, 19 69:5, 6, 8, 12, 17, 18, 20 70:14	bribe 93:22	Calhoun 102:8	Caption 225:4
better 70:2 75:5, 7 103:12, 14	body 139:4 140:1 167:6	bribed 95:10	call 108:16 109:17 116:10 137:7 149:18, 21	captioned 225:11
beyond 20:3 21:6 22:2 35:6 70:20 118:7 149:13 166:7 168:17 171:18 173:4 174:24 182:6 187:5	Bold 2:4	bribery 89:16, 21	called 10:17 68:21 119:14 150:2 155:3 201:9	capture 124:16
bias 112:4 113:5 121:7, 17 155:3, 4, 5, 16 157:23, 24		briefly 61:6, 9 102:9 118:24 183:22	calling 212:7	car 147:1
biased 113:19		bright 169:20	CAMDEN 1:2	Carcinogenesis 9:10 201:9
		bring 210:11	camera 199:14 207:6	
		Bristol-Myers 105:21	Camp 2:9	
		broad 217:1	cancelling 91:19, 20	
		broader 118:4	cancer 9:4 41:17, 18, 19 42:3 59:17 64:8, 17 107:12, 13, 19	
		broadly 89:8		
		broken 70:24		

carcinogenic 78:13, 16 110:10 137:22 138:16 139:13 141:5 142:12 144:6 165:3	23 126:13 128:11 140:12 147:11 165:19 187:18, 21 188:11, 19, 23 191:16 200:2 208:12, 14 219:1, 21 225:4	causes 167:11 169:3 185:23 201:1	certifications 63:22 64:8, 9, 13 Certified 1:18 63:23 64:1, 15 224:4, 24 certify 224:5, 10, 15 cetera 96:22 cgannon@wals h.law 4:23 chain 8:11 91:11 96:12 97:6	check 54:16, 18 chemical 78:13 chemicals 64:14 110:11 chemistry 61:12 cherry 121:15 cherry-picking 121:8 Chickasha 61:10 chief 61:15 choice 217:3 choose 178:12 CHRISTINE 4:22 210:10 CHRISTOPHE R 3:20 christopher.hen ry@bipc.com 3:20 CIPRIANI 5:9 circumstances 165:7
carcinogens 143:13, 24 144:4, 5, 15 170:13 cardiography 8:21 117:13 119:2, 21 cardiorenal 69:10 134:8 175:5	CASES 1:7 11:15 41:9 59:8, 10, 13, 18 154:12 cast 75:1 casts 152:8, 9 CAT 153:14 215:12 catastrophes 175:11 catch 11:23 158:22 catches 106:15 categories 39:20 56:1 70:12 category 36:16 115:2 195:9 causal 145:5 149:10, 11 184:16 causation 110:10 116:3 175:1 200:6 cause 116:7 138:20 142:5 143:15 147:1 148:17 153:18 163:24 170:20 171:8 177:12 190:16, 17, 23 215:16 caused 132:3 180:9 200:7, 9, 16	caution 196:6 cautious 143:19 cell 152:9 cells 152:8, 18, 21, 23 153:3, 9, 18, 19 154:12, 19, 22 Center 4:20 Centre 5:16 cert 88:20 certain 13:14 16:9 18:3 22:7 49:4 59:23 66:7, 14 84:12 90:1 95:23 101:15 108:8 111:9 113:10 117:3 124:1 135:13 138:23 139:1, 21 141:10 143:15 157:10 192:22 193:17 202:1 216:21 220:3 certainly 38:5 42:13 88:20 143:20 154:4 161:5 169:2 172:13 186:19 189:18 206:16 218:21 219:19 CERTIFICAT E 224:1 Certification 64:5	challenging 56:23 chance 123:1, 3 change 67:17 221:19 226:4, 7, 10, 13, 16, 19, 22 227:4, 7, 10, 13, 16, 19, 22 changed 82:12 141:22 changes 61:2, 4 225:13, 15 channel 180:8 channels 171:2 chapters 106:12, 18, 20 characterizatio n 35:2 98:1, 14 126:1 characterize 138:24 147:5 characterized 86:6 89:15 characterizing 93:22 charged 115:22 116:2 Charles 201:11 Charlotte 3:19 charts 38:21 39:10 40:4, 19 chat 193:22 194:2 195:1	Chickasha 61:10 chief 61:15 choice 217:3 choose 178:12 CHRISTINE 4:22 210:10 CHRISTOPHE R 3:20 christopher.hen ry@bipc.com 3:20 CIPRIANI 5:9 circumstances 165:7 cite 101:22 150:11 156:18 157:3 186:23 cited 145:3 Civil 1:5 47:16 claim 165:12 claims 115:6 clarification 120:2 clarify 181:9 184:9 class 35:19, 22 101:11 classes 34:20 35:18 36:2 cleanup 59:4 clear 12:12 38:4 40:10, 16 44:24 48:21 57:8, 11, 14 65:15 68:8, 23 95:2 98:9 147:20,

22 168:15 171:17 203:2 clearly 35:4 97:7 118:9, 15 149:5 151:7 clears 58:12 clinic 63:13, 14 clinical 63:9, 11 64:2 69:7 70:2 110:22, 24 111:7, 8, 15, 24 112:1, 16 113:8, 9 114:7, 11, 12, 18, 19 154:19 close 100:2, 6 139:7 183:10 closer 158:2 closes 180:11 clue 76:9 79:12, 16 COAN 5:23 coauthor 102:14 117:10 coauthors 102:6, 12 219:8 Cochrane 119:9 coffee 176:15 cohort 115:3 collect 115:15 collected 27:3 122:13 124:17 collection 14:1 College 2:14 62:7 210:7 211:7 colloquy 16:16 32:5 37:5 38:9 57:7 79:9 99:12 115:18 132:24 140:11 141:21, 23 144:21 167:20	181:13, 14 212:1 combination 8:15 103:4, 21 104:12, 14 105:5 combining 118:1, 8 come 16:6, 14 21:13 25:2 27:12, 24 31:2 70:15 82:21 125:18 129:7 139:7 148:8 156:4 168:22, 23 176:12 187:4 197:13 comes 79:22 153:13 197:2 comfortable 56:19 coming 53:2, 4 55:7 83:14 98:9 125:23 133:20 155:6 184:3 command 132:11 commencement 224:6 commencing 1:15 commendable 134:13 commentary 211:23 comments 178:5 commissioning 134:18 commitment 71:15 75:14 committed 210:20 common 108:7 199:5 commonalities 107:20	communicate 56:22 communicated 46:21 137:5 communication 46:8 92:20 173:3, 22 communication s 31:1 42:18 43:22 44:1 45:17, 18 46:3, 13, 19 94:3, 18 132:20 comorbidities 109:12 151:6, 11 199:2 companies 65:2, 7, 13, 22 66:18 67:5, 17, 24 68:10, 14, 15, 16 69:12 76:23 79:4, 19 86:13 89:11 91:17 133:21 173:3 205:13 company 66:16 69:17, 22 70:18 73:10 82:24 92:21 95:3, 11 173:7 204:19 comparable 103:23, 24 200:23 compared 8:16 134:1 158:4, 13 163:17 167:7 comparison 155:24 compatible 38:6 compel 142:19 compensated 83:3 compensation 81:14	Complaint 85:13 complete 47:24 48:15 134:15 completed 48:20 49:21 62:9 71:2 73:22 75:9 compliance 48:12 51:7 complies 47:22 48:3, 7, 18 compound 57:8 179:17 compounds 137:12 138:15, 19 139:13 141:4, 12 142:11 169:17 comprehensive 51:11 comprising 24:8 computer 20:3, 6 21:8 23:21 24:14 26:21 28:12 33:6 34:7 222:5, 14 computer's 187:11 con 48:14 concentrate 152:13 concerned 143:9, 10 154:6, 7 concerning 52:18 concerns 17:15 conclude 86:19 104:11 concluded 223:8 concludes 222:23	conclusion 52:2, 4 82:21 102:23 103:4 104:4, 10 137:8 146:16 147:6, 12 148:7 174:1 conclusions 51:15, 16, 22, 23, 24 52:5, 6 113:18 114:23 115:16 127:3 128:10, 11 148:8 176:13 condition 113:11 conditions 113:11 141:10 142:6 143:5 199:21 Conduct 50:9 65:7 78:20 conducted 64:21 78:6, 9, 11 89:10 119:4, 8 145:1 conference 168:21 conferences 211:19 confidence 123:18 CONFIDENTIAL 1:9 confirm 31:15 194:18 conflict 105:13 205:8 206:21 207:3 219:1 conflicts 204:6 205:11 206:6, 11, 15, 24 209:21 210:15 confounding 113:22, 23 159:18 connected 186:18
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

connection 38:13, 22 52:12	containing 9:8 167:4 200:7	137:12, 20 185:21 214:23	174:4 179:15 186:7, 22, 24 189:20	201:3, 12, 19 203:3, 12, 20 204:4 206:5
consider 54:22 73:1 135:17	contains 48:14 188:22 193:9	controlled 67:2 122:20 213:24 214:6, 13, 18 216:7, 16	190:18 211:1, 14 218:17 219:15 220:21, 22 221:1	207:12, 18, 20 208:18 212:22 222:19 223:1 224:16, 18
Considered 8:24 9:7 55:21 56:6 57:1, 17, 19 123:22 129:9, 12, 14 131:14 138:7 161:8 171:7 186:16 188:14 192:3 207:12, 17 217:8	contaminants 165:21	conversation 44:2	corrections 225:13	Counselor 216:14 219:5
considering 147:17	contaminate 154:24	conversations 43:10 44:6 45:22 46:9	correctly 145:10, 12 159:19	counsel's 35:5, 10, 15 140:11
consistent 39:15 163:14	contamination 172:6, 11, 20 174:2 177:9 181:6, 24	co-PI 76:20	corruption 93:14	count 221:19
constituents 108:9	contemporaneo usly 19:21 27:19	Copies 25:18, 24 32:2 34:17 36:6 38:12	costs 197:6 couch 40:11	country 88:5 couple 10:23 14:13 24:21 59:4 69:13 70:17 74:23 112:23 116:11 182:15 189:13 211:4 216:15
constituted 83:21 89:2	content 53:12 85:17 131:18 133:14	copy 13:6 25:4 33:3 49:9 60:3	counsel 14:17, 18, 20 16:15 18:14 19:6 21:16, 20 25:4, 23 26:5 27:9, 21 28:3, 19 29:22 30:14 31:3, 12 32:18 34:4 35:3, 14 37:16, 20 39:3, 22 42:6, 21 45:8, 19, 23 46:3, 5, 9 57:9 58:19 60:4 71:6 90:20 96:20 97:8 99:14 103:8 105:3 124:11 125:6, 8, 9, 14, 17 126:7, 9, 10 127:12, 16, 20 128:15, 16 129:3, 13 130:10, 19 141:13, 24 157:14 175:20 183:12 189:11 192:2, 14 193:10 194:9, 11 196:9, 18	counseled 163:13 course 70:10 102:14 107:8 125:19 196:20 COURT 1:1 10:11 12:16 192:6, 18 193:12, 15 194:3 195:2 220:12 court's 140:12 covered 24:21 coveted 82:7 COVID 218:8 co-written 204:2 crackdowns 67:16 cracked 66:23 crap 176:16 crashing 74:15 creating 104:13 206:22 credible 207:4 credit 169:21 criter 120:23
constructed 15:17	contention 171:14	corollary 123:11		
consult 20:17 23:14 81:10	content 53:12 85:17 131:18 133:14	corporate 73:7		
consultant 105:19	contention 171:14	CORPORATI ON 4:3 72:23		
consultation 34:14	contents 47:17	Correct 11:22 13:24 15:7 16:1 18:11, 15 19:8 26:8 31:21 32:12 35:2 42:4 46:24 47:2 48:23 49:16 51:3 52:23 54:19 55:21 59:9 60:18 68:11 70:15 74:3 80:13, 14, 15 85:23 91:9 96:17 104:20 105:16 116:12, 16 117:16 119:12, 13 120:8, 9, 24 125:15 126:4 128:23, 24 133:14 145:18, 19 162:16 165:4		
consulted 65:22 93:1	context 11:12 12:3 28:2 119:1 160:23 163:22	Correct 11:22 13:24 15:7 16:1 18:11, 15 19:8 26:8 31:21 32:12 35:2 42:4 46:24 47:2 48:23 49:16 51:3 52:23 54:19 55:21 59:9 60:18 68:11 70:15 74:3 80:13, 14, 15 85:23 91:9 96:17 104:20 105:16 116:12, 16 117:16 119:12, 13 120:8, 9, 24 125:15 126:4 128:23, 24 133:14 145:18, 19 162:16 165:4		
consulting 25:20 65:17 68:13, 16, 19, 22 69:1 70:14 79:4, 18 80:3, 6	continuation 221:5	copy 13:6 25:4 33:3 49:9 60:3		
consumed 163:15	continue 52:16 187:11 196:1	corollary 123:11		
contacted 188:8	Continued 3:3 8:1 9:1 55:11	corporate 73:7		
contain 47:24 169:10	continuing 180:21 196:2, 6	CORPORATI ON 4:3 72:23		
contained 19:3 90:21 207:15 208:5	contracts 70:22 73:22 75:9	Correct 11:22 13:24 15:7 16:1 18:11, 15 19:8 26:8 31:21 32:12 35:2 42:4 46:24 47:2 48:23 49:16 51:3 52:23 54:19 55:21 59:9 60:18 68:11 70:15 74:3 80:13, 14, 15 85:23 91:9 96:17 104:20 105:16 116:12, 16 117:16 119:12, 13 120:8, 9, 24 125:15 126:4 128:23, 24 133:14 145:18, 19 162:16 165:4		
	contribute 177:10	copy 13:6 25:4 33:3 49:9 60:3		
	contributed 177:10 181:6	corollary 123:11		
	control 66:24 111:24	corporate 73:7		

criteria 120:8, 10, 13, 23 121:5, 19, 20 122:19 123:14 critical 176:14 crucially 148:4 CT 153:23 154:13 CULBERTSO N 5:21 current 10:24 11:2 39:19 40:17 114:15 currently 69:16 Curriculum 7:19 cursorily 58:7 cursory 188:20 189:6 cut 197:6 cutting 131:9 CV 41:7, 13 58:13 59:21 60:7, 9, 11, 19, 21, 23 61:1 64:24 65:16 71:7, 8 73:19 76:16 77:8, 18 78:3 101:23 106:5 107:2 110:12 218:19, 22, 23 219:15, 18 CVRx 105:21 CVS 4:3 cycles 112:23 cystoscopy 153:10 < D > D.C 3:14 4:16 d.stanoch@kan ner-law.com 2:12 Daiichi 105:22 damning 206:22 danger 178:17 data 31:17, 18, 20 32:17, 22	47:13 51:22 104:10, 18 113:20, 21 114:11 115:5, 7 116:10, 13 118:3 143:18, 20 159:24 160:1 164:12, 15, 18 167:1 185:13, 17, 18 186:1, 15 190:7, 13 database 15:23 110:23 113:9 114:12 databases 111:7 119:9, 19 120:13 dataset 112:1, 24 113:24 114:1, 3 115:7 datasets 110:20, 21 113:16 114:8, 9 Date 7:17 9:11, 13 10:3 20:12, 14 22:15 24:18 48:10, 11, 16, 20, 22 49:1, 22, 23 68:20 104:20 173:1, 2 212:18 224:13 dated 8:4, 10, 11 23:8 60:12 85:1 91:5 Daubert 38:23 Dave 102:8 DAVID 2:11 DAVIS 2:4, 6 7:6, 8 10:20, 22 13:2, 10, 12, 18 16:21 17:9, 13, 24 18:19 19:1, 4, 17 20:23 22:3, 11 23:5, 22 24:5, 16	25:7, 8 29:4, 12, 23 30:7 31:13 32:9, 20 33:4, 15 34:1, 16 35:9, 16 36:4, 23 37:11, 22 38:10, 18 39:17 40:1, 8, 12, 14 45:5, 13 46:1, 11 48:13 49:8 51:13 52:1 53:16 54:14 57:10, 12 58:10, 18, 20 59:3 60:5, 6 64:23 65:9 67:8, 22 71:8, 9 73:2, 9, 20 77:4, 10, 15, 23 78:5 79:13 81:15, 21 82:14 83:8, 19 84:10, 16 86:4 87:2, 19 88:10, 23 89:22 90:5, 23, 24 93:20 94:8, 21 95:14 96:3, 23, 24 97:9, 13 98:10 99:20 101:13, 19 103:10, 15 104:23 108:13 109:1, 14, 19, 23 110:7 115:23 116:23 117:7 122:7 124:5 125:3 126:17 127:8 128:12 130:15, 20 131:5, 8, 11, 12 133:11, 23 135:7, 21 136:6, 12, 20 137:9, 18 138:4, 12	139:9 140:3, 5, 24 141:13, 17 142:8, 16 143:11 144:11, 22 146:5 148:11 150:10 152:2 156:17 157:16, 17 164:3, 20 165:10 166:3, 19 167:13 168:2 169:7 170:5, 15 171:5, 24 173:9, 23 174:11 175:19 176:17 177:7 179:4 180:24 181:21 182:13, 23 183:9, 13, 20 184:11 186:2, 21 187:7, 13, 22 188:6 189:5 190:20 191:9, 17 192:7, 10, 15, 17, 20 194:6, 17 195:3 196:1, 13 198:11 199:12 201:14, 18, 22 202:5, 10, 17, 24 203:7, 13 204:8, 12 205:15, 23 206:3 207:6, 16 208:22 209:6 210:13 212:3, 8, 20 213:6, 20 214:20 217:3, 6 218:2, 5 219:13, 22 220:7, 11, 15 222:18 223:3 day 1:16 121:2 138:23	183:3 189:24 214:4 224:22 225:21 DE 6:2 10:2 deal 180:12 dec 203:17 decade 88:1 decades 79:6 195:16 decided 75:2 180:18 deciding 83:4 decision 16:14, 15 67:2 decisions 134:5, 6 declar 203:16 declaration 203:17 225:7 declare 225:9 decreased 149:2 164:22 decreases 164:24 165:1 deemed 148:8 de-emphasized 66:8, 18 67:19 de- emphasizing 67:10 95:18 defend 211:22 DEFENDANT 3:11 5:13, 20 15:2, 3 125:24 126:2 191:5 DEFENDANT S 4:3, 7 5:3, 9 7:14 44:19 45:1, 8, 19 46:4 47:3 130:2 187:20 188:10, 23 191:16 212:5 defense 14:19 46:16 47:8 defensive 216:2 definition 122:23 136:2, 3
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

definitive 143:20 144:5 161:4 defunct 64:2 degree 155:19 161:24 162:10 213:23 214:3, 12 216:10 de-identified 113:9 114:12 deliberately 213:4 demonstrating 118:22 demonstrative 38:21 39:11 40:4, 19 Department 8:3 42:13 62:8 84:21 depend 173:4 dependence 174:8 Depending 165:7 depends 26:20 144:6 158:13 164:2 deponent 10:8 DEPOSITION 1:11, 14 7:15 10:5, 22 13:1, 15 22:8 49:5 59:24 84:13 90:2 95:24 101:16 117:4 124:2 125:16, 21 126:6 127:23 157:11 192:23 193:18 195:8 202:2 220:4 223:8 225:1, 10, 14 226:1 227:1 depositions 126:11, 12, 13, 19, 20 175:22 208:10	deps@golkow.c om 1:23 depth 127:7 describe 14:5 30:20 117:20 136:24 described 57:21 89:21 describing 172:6 174:13 description 50:5, 20 159:23 221:2, 3 descriptive 111:3 deservedly 82:7 designated 205:18 despite 198:3 detail 131:20 detailed 53:17 details 164:1 detect 155:16 detectable 169:18, 22 170:4 detection 155:3, 4, 5 157:23, 24 158:3, 12, 17 determination 116:4 172:17 200:6 determine 168:14 170:17 174:15 Detroit 62:24 63:1, 2 develop 69:3 139:22 186:16 developed 114:16 184:20 development 9:4 102:15 145:7 device 68:16 devil 164:1	diabetes 108:7 151:2 199:3 diagnosed 156:3 197:24 diagnosis 177:2, 10 diagnostic 214:22 diet 107:17, 19 109:11 dietary 108:8 113:21 199:4 dieticians 197:3 difference 112:5 129:11 differences 211:9 217:20 different 41:20 55:19 68:19 108:24 109:3 111:17 112:2, 9 113:12, 13 114:8 123:8 163:22 186:20 217:10 differently 56:18 103:18 difficulty 166:11 193:24 dinner 92:15 dinners 88:18 Diovan 80:12 92:16 101:5 104:4 Dipak 201:11 dipstick 152:6 direct 74:24 88:21 90:7 155:24 198:14 201:17 213:18 219:20 directed 155:8 directing 188:13 197:14 directly 28:3 66:15 78:15	197:13 204:4 208:5 224:19 director 63:13 dirtier 113:20 disagree 88:24 122:18 158:8 159:8, 22 disagreed 122:12 disciplines 78:18 disclose 204:6 206:15 210:5 218:24 disclosed 56:16 204:21, 22 205:12 209:20 210:22 218:18, 21 219:15, 16 disclosure 206:6 210:15, 24 211:9, 21 218:20 219:2, 10 disclosures 210:1 211:14 discounting 122:16 discover 154:14 Discovery 125:14 148:6 154:11 discuss 44:4 53:3 61:22 109:5 120:8 145:8 160:24 164:16 171:10, 11 212:22 discussed 36:3 108:15 109:16, 24 111:13 145:21 160:19 161:2, 3 175:23	discussing 90:11 157:22 160:10 discussion 35:23 220:12 discussions 16:15 169:19 211:20 Disease 8:20 152:10 155:14 215:8 diseases 108:12 113:10 215:23 disparate 122:24 display 138:15 139:13 141:4 142:11 disputable 186:1 distinction 34:9 distorting 213:4 DISTRICT 1:1 8:4 90:9 diuretics 113:15 dive 127:7 diverse 26:16 division 114:17 DNA 137:20 doc 156:14 docket 90:8, 17 96:8 Doctor 97:7 131:13 132:18 133:1 139:10 140:8, 14 142:9, 23 147:18 157:18 159:6 181:1 188:2, 13 190:15 191:2, 4 193:5 195:8 197:14 199:8, 23 203:18, 20
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

207:11 209:3, 7, 14 215:14 216:1, 4 218:6 222:24 Doctors 8:8 85:19 86:8 88:5 156:14 doctor's 96:13 98:19 187:11 DOCUMENT 1:6 13:14, 20 16:9 17:15 18:10 19:3 22:7 25:10 30:11 41:8 44:7 49:4 57:24 59:23 84:12 90:1, 14, 15 94:12 95:23 101:15 117:3 124:1, 23 138:1, 3, 14 139:14 157:10 188:18, 21 192:22 193:6, 17 202:1 208:18 209:1 217:4 220:3 documentation 21:23 34:18 41:2 89:20 documentation s 41:1 documented 25:21 44:14 documents 14:2, 7, 8 16:5, 13, 19 17:19, 23 18:2 19:9 21:21 23:14 27:3 30:10, 16, 21 32:4 34:13 35:1, 6, 8 36:6, 11, 17, 21 37:3, 8, 13, 19, 24 38:5, 12 39:20 40:23 42:7, 12, 17, 22	43:9, 14, 17, 22 50:9 56:1, 2, 4, 12, 14, 15 57:17, 19 58:1 124:10, 17 125:5, 13 127:4, 15, 18 128:1, 6, 14, 17, 22 129:17, 20 136:8 137:4 138:8 171:9 174:14, 19 175:21 176:5, 11, 12 188:15 194:10 195:9, 24 207:15, 21 208:1, 3, 4, 10 220:20 doing 11:18 27:19 34:14 56:19 62:7 65:23 68:3 70:19 82:1 83:7 84:8 86:7 89:5, 7, 8 95:2 97:14 99:9, 17 100:1 116:9, 15 118:8 122:10 123:5 130:2 144:20 150:18, 19 153:23 154:9 161:9 173:13 208:21 215:4 221:6 DOJ 89:14 dollar 95:4 100:13 210:21 dollars 73:13 79:15 88:2 95:12 204:3, 18 210:3 domino 93:12 door 180:11 dose 144:7 163:16 188:22 189:8 190:1 191:4, 5	doses 189:2 dot 138:8 doubt 99:4 151:9 211:17 downloaded 112:22 downloading 31:2 Dr 10:8, 21 11:8 13:19 17:14 22:12 25:9 28:16 29:24 34:20 35:10 40:9, 13, 15 49:10 50:3 55:22 57:13 58:15 59:4 60:8 84:18 89:13 92:8 96:6 98:1, 13 99:8, 22 100:5 103:16 118:16 124:7 183:21 187:17 201:10 205:24 217:7 drafted 205:11 drafting 102:13 draw 114:22 115:16 128:10 drawing 114:8 drift 156:7 drinking 165:20 170:12 drive 9:8 30:19 193:9, 13 202:23 driver 82:16 83:6 drop 195:1 dropping 194:5 drug 42:20 43:18 74:24 75:1, 5, 6, 15 82:23 101:11 104:15, 20, 21 149:5, 6	167:19 168:23 169:10 173:5 174:9 175:17 177:22 180:21, 22 182:4, 11 Drugs 8:9 88:6 131:18 133:18 149:7, 9 165:23 166:5 168:10 170:2 178:20 179:2 180:19 198:3, 5 DUANE 5:5 due 110:10 220:23 duly 10:13, 17 224:7 dumb 182:19 duration 116:5 144:7 200:15 201:1 duties 79:24 dwelling 137:17 < E > earlier 59:6 151:17 early 49:20 76:21 195:8 earned 79:18 93:15 ears 147:16 172:15 181:19 easier 115:21 158:3 easily 192:19 easy 78:23 125:9 echo 73:3 edema 105:7 edit 162:8 editor 56:20 122:3 160:14 161:12, 16 203:22 204:1, 6, 15, 23 205:21	206:10, 12 209:24 211:3 editorial 211:20 218:7, 10, 15, 22 219:2, 6, 7, 15, 18 educate 81:20, 22, 23 82:9 86:22 education 62:22 educational 61:7 85:17 110:17 effect 146:23 165:3 176:21 177:22 179:10 213:17 effective 104:12 effectively 103:22 effects 41:4 177:16 Efficacy 8:15 effort 181:23 eight 112:22 Eisenhower 2:20 either 14:10 24:15 31:2 83:16 137:10 142:22 160:20 162:24 165:2 176:9 204:16 211:17 electronic 25:19 31:7, 16, 18 32:13, 17, 22 33:2, 6, 17 electronically 26:15 33:23 else's 127:2 E-mail 8:10, 11 28:3 90:17, 19 91:4, 5, 11 92:3 93:5
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

94:10 96:12 97:1 98:1, 12, 16, 17, 18 194:22 195:3 e-mails 46:13, 20 196:4 eml 202:10 203:9 employ 86:22 employee 224:16, 18 employees 102:6 136:23 employs 113:2 en 33:24 enacted 91:16 encompassed 23:8 encourage 87:8 endeavor 51:14 53:3 ended 22:19 endocrinology 114:17 endometrial 154:21 endometrium 154:24 engage 82:11 engaged 67:20 219:11 engagement 66:16 212:12, 14 engaging 207:1 English 132:11 enrolled 61:14 ensure 113:17 153:11 entered 61:12 entire 63:10 100:11 113:3, 7 225:10 entirety 32:3, 10 entities 43:8 107:20	entitled 28:20 29:13 141:13, 16 142:2 entity 42:19 43:18 72:18, 20, 22 204:19 205:5 210:4 entries 106:9 envelope 193:14 ep 112:13 EPA 144:14 epi 62:10 111:8, 22 112:1, 16 113:8 114:24 epidemiologic 110:21 123:6 149:15 159:24 162:21 163:13 215:22 epidemiological 111:14 114:22 116:18, 22 118:5, 9 160:7 epidemiology 61:20 110:20 111:2, 3, 5, 6, 18 112:14 118:7 148:13, 18 150:18, 20 195:18, 19 197:16 equal 160:20 equated 76:11 equipped 78:17 114:2 171:22 equivalent 71:12 Ernesto 219:7 ERRATA 225:1, 14 226:1 227:1 erroneous 51:24 52:3, 5 error 123:10 176:15	ESQ 2:6, 10, 11, 16, 17, 21 3:6, 10, 15, 20 4:6, 13, 17, 22 5:7, 12, 18, 23 essential 202:15 essentially 74:13 75:13 88:17 129:20 185:24 205:7 214:19 establish 99:7, 18, 21 132:2 146:24 established 68:23 204:9 estimate 22:17 72:9, 13 79:7 123:16 152:6 221:9 estimates 112:21 113:3 116:6 123:17 et 8:18, 22 9:5, 11 96:22 ethical 82:22, 24 89:10 210:19 Europe 115:4 116:12, 14 133:18 European 134:19 190:6 199:18 Europeans 134:10 evaluation 153:6, 7 event 100:1 events 82:17 85:16, 17 86:7 88:14, 19 93:23 100:16 eventual 154:11 everybody 56:17 66:22 167:3 223:2	evidence 73:18 86:24 89:18 101:12 112:6 115:1 132:2 135:24 137:2 162:21 163:14 165:1, 18 167:11, 21 169:14 172:23 173:17 185:9 200:13, 14 214:2, 3 evil 166:6 exact 20:12, 14 212:18 exactly 38:17 47:6, 23 112:17 118:20 135:11 150:9 170:21 181:16 200:1 EXAM 7:6, 7, 8 EXAMINATIO N 10:19 111:20 187:15 209:5 224:6 examine 116:3 examined 10:18 116:9, 13 160:11 examining 78:13 146:23 example 16:23, 24 17:18 20:8 41:23 43:2 54:15 56:3 87:10 105:8 114:7 121:15 122:11 123:5 136:22 138:14 157:4 172:18 175:22 208:7 examples 155:2 exceed 176:8	excellent 104:20 exception 54:13 191:6 excess 134:24 135:19 140:21 exclude 123:12, 13 excuse 211:10 exercise 107:17 124:22 147:6 150:24 206:24 Exforge 80:12 exhaustively 32:14 EXHIBIT 7:13 8:2 9:2 12:24 13:16 22:5, 9 25:3, 11 49:6 55:20 56:2 59:22 60:1 84:10, 14 90:3, 16, 21, 22 94:24 95:22 96:1, 6, 7, 21 99:14 100:3, 7 101:14, 17 106:6 117:1, 2, 5 123:23 124:3, 18 129:8 131:14, 16 138:6 157:8, 12 192:3, 5, 11, 24 193:3, 19, 22 194:4, 23 201:23 202:3, 6 207:13, 15, 16, 17, 20 209:11 220:5 exhibits 38:22 39:11, 21 40:5, 6, 7, 19 98:2 125:16, 21 126:6, 11, 12, 19 127:11, 23
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

exist 30:24 44:1 64:13 222:21 existence 39:9, 19 40:3, 17, 18 76:10 existing 197:10 exists 42:11 exorbitant 88:3, 12 94:5 expands 185:18 expansive 161:23 162:3, 6 expect 28:5 89:4 160:15 162:16 173:19 204:6 expectation 169:9 207:4 expected 181:11 204:22 expecting 21:11 expenses 70:20 experience 61:23 69:14 82:6 151:13 195:16 211:15 experiences 88:11 experiment 111:5 experimental 111:7 138:20 experiments 138:22 Expert 7:19 11:14, 18, 19 14:9, 23 15:1, 2 27:7, 8, 22, 23 37:21 44:15 46:23 47:1, 3, 10, 14 59:7, 14, 19 60:20 94:5 124:12 125:23 127:3, 9, 11 130:2	147:19 175:1 204:20 205:17, 19, 20, 24 expertise 82:6 137:16 168:20 176:7 experts 46:16, 17, 22 47:9 97:20 98:4, 7 99:3 130:1 145:4 explain 28:14, 17 29:15 51:15 56:8 135:8, 10 160:18 167:24 177:11 206:9 215:2 explainable 67:6 explained 135:9 151:5 explaining 148:21 explanation 150:7 161:6, 24 162:7 205:3 explanations 149:14 154:17 198:24 explicitly 173:11 exposed 116:6 138:22 169:23 185:8, 20 exposure 64:14 78:18 110:10 115:5 116:4 138:24 139:7, 21, 24 140:22 143:5, 15 144:7 145:6 146:22 149:6 163:12 164:2, 13 167:2, 6, 10, 11 184:22	185:22 189:14 191:12, 15 200:7 201:1 208:15 exposures 141:11 149:6 190:8 express 48:1 133:8 186:9 expressed 47:8, 10 52:22 55:7 133:8 186:4 198:19 expressing 146:6, 9, 14 EX-STAND 8:17 extend 127:4 extends 71:3 extensive 21:21, 22 extensively 58:7 210:8 extent 43:24 64:12 212:6 ex-train 160:17 extrapolate 113:7 139:3, 23 extremely 138:15 139:13 141:4 142:11 < F > face 162:15 fact 50:20 51:5 55:13 85:17 92:3 130:16 134:3 155:9 172:11 198:4 211:3 215:6 factor 57:6 66:24 152:12 factors 107:16, 18 108:2, 11, 16 110:5	111:23 148:23 149:9 151:3 184:15 facts 53:3 89:17 99:7, 16, 18, 21 105:11 135:23 137:1 167:20 169:13 172:22 173:16 factual 51:22 faculty 61:17, 21 62:15 63:4, 6 68:7 FAHA 1:11, 15 7:4, 15, 21 10:16 225:18 226:24 227:24 Failure 9:10 201:9 fair 64:24 73:12, 17 95:5 113:22 147:5 161:23 162:2 184:1, 23 fairly 30:24 132:12 159:23 178:13 214:7 FALANGA 4:20 fall 93:12 114:24 118:4 falls 115:3 false 123:10 215:7, 24 familiar 26:2, 4 86:5 107:19 108:11 110:5 156:22 209:19 211:5 218:15 familiarize 47:16, 19 115:13 fancy 113:2 far 18:13 97:21 98:7	134:24 149:13 173:13 176:8 FARR 3:4 FASH 1:11, 15 7:4, 16, 21 10:16 225:18 226:24 227:24 fashion 26:23 Fast 180:13 220:16 fat 108:9 faulty 121:20 favorable 103:6, 23 104:4 105:8, 9 favorably 101:5, 10 fax 1:23 FDA 66:23 67:16 69:8, 10, 13 70:4 84:3 128:14, 17 134:2, 5, 8, 15, 17, 18, 19, 23 135:1, 13 137:10, 20 138:2, 8, 14 139:12 140:7, 19 141:2, 15, 20 142:10 143:1, 4, 8 163:17 168:20, 21 169:3, 18 171:9 172:13 173:2, 4, 6, 8 174:8, 20, 22 175:4, 5, 14 188:15 189:2 190:5 208:7, 24 FDA/European 167:1 FDA's 135:19 141:3 146:7 167:17, 23 168:4 174:3 188:22 191:4 feasible 168:9
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Federal 47:16 48:18 90:8 feedback 160:16 feel 28:15 47:21 48:3 51:5 53:7 fees 88:3 94:4 fellow 76:19 fellowship 61:19 felt 51:10 125:22 136:5 fence 218:11 Ferrario 8:22 fertile 148:24 fiction 104:14 field 68:24 69:4 81:4 87:18 88:18 119:15 fields 120:4 figure 171:16 172:10 file 30:17, 18, 19 31:7, 16 32:1, 3, 8, 11, 13 33:6, 9 filed 90:15 96:7 files 31:1 filing 186:24 final 15:8, 9 219:23 finally 44:8 financially 102:21 find 55:14 114:6 122:24 123:3 154:3, 13 155:13 185:7, 15 190:24 215:20 finding 168:24 215:15 findings 154:17 fine 13:12 28:19 58:17 90:23 94:20 96:23 162:2	183:12 192:9, 15 203:3, 12, 13 finish 53:23 62:9 118:20 finished 61:20 72:12 188:22 189:2, 8 191:4, 5 195:18 Fir 86:12 FIRM 2:14 3:4 73:6 first 10:17 11:3 24:22 50:2 52:9, 10 56:11 79:21 86:12 90:7 92:8, 17 93:12 94:2 100:8 108:5 112:12, 21 115:13 116:21 121:11 126:3 130:22 146:9 148:15, 18 150:2 168:19 173:1, 2 177:21 204:16 221:4, 14 firstly 167:12 185:7 Fishbein 9:11 201:10 209:8 fit 120:18 122:19 123:14 five 11:11, 16 12:2, 4 27:3 58:19 59:7 102:6, 8 149:14 177:2 178:11 183:11 FLACK 1:11, 15 7:4, 15, 19 8:18, 22 10:8, 15, 21 11:8 13:19 17:14 22:12 25:9 28:16 29:24	34:20 35:10 40:9, 13, 15 49:10 50:3 55:22 57:13 58:15 59:4 60:8 84:18 89:13 96:6 98:1, 13, 18 99:8, 22 100:5 103:16 118:16 124:7 157:9 183:21 187:17 192:8, 12 193:3 205:24 217:7 225:18 226:24 227:24 Flash 9:8 193:9, 13 202:23 Floor 4:21 5:21 Florida 3:5 flushing 180:10 focus 41:9 73:10 109:9, 10 focused 45:2 158:20, 24 176:6 folded 64:3 folder 19:2 folks 97:12 follow 40:9 156:4 158:11 following 57:9 111:12 113:10 199:9 215:16 follows 10:18 145:13 214:1 follow-up 114:14 156:14 167:16 179:12 follow-ups 209:8 font 103:13 food 91:17	175:17 football 61:12 Footnote 157:3, 4 footprint 68:23 69:3 forced 67:17 foregoing 224:10 Forest 62:23 Forgive 111:11 156:18 form 16:16, 17 17:6, 12, 20 19:13 20:19 21:15 23:1, 16 24:10 28:23 29:8, 17 30:2 31:9 32:15, 23 33:7, 19 34:11 35:3, 12, 24 36:19 37:15 38:15 39:13, 22, 24 44:22 45:9, 20 46:6, 21 48:5 51:8, 17 53:13 54:8 56:9 58:4 64:19 65:3, 13 66:20 67:12 73:13, 15 77:1 81:18 82:3, 18 83:12, 23 85:24 86:9 87:6 88:9, 15 89:17 93:24 99:13 101:7 103:7 104:6 108:3, 20 109:7, 18 115:19 116:11, 19 118:6 121:9 126:14 128:3 135:2, 23 136:9 137:1, 13, 23 138:9, 17 139:16	141:6 142:13 144:1 145:24 147:8 148:1 149:23 151:23 155:21 163:8 164:9 165:5, 15 166:7, 22 167:20 168:17 169:13 170:8, 22 171:18 172:22 173:16 174:5, 24 176:1 177:4 179:16 181:14 182:22 183:5 184:7 185:1 186:11 187:22 199:12 208:11 209:22 212:6, 15, 24 213:14 214:14 217:1 219:3, 16 222:11 formal 195:17 formally 222:18 format 31:8 61:9 formation 173:12 forming 44:9 47:9 58:2 195:14 forms 27:24 111:14 formulary 67:2 forth 36:7 42:12 51:6 113:19 161:20 162:14 184:14 216:16 224:13 forward 180:13
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

forwarded 30:14 31:17 32:18, 19 33:11, 12, 22 34:3 36:14, 21 37:8, 19 forwarding 161:16 forwards 56:21 found 30:10, 13 34:6 53:4 163:12 176:22 177:13 178:2, 14 foundation 19:13 20:19 29:8, 17, 22 30:3 87:6 90:22 96:22 99:13 101:8 126:14, 22 128:4 136:9 159:4 176:2 179:16 182:1 183:5 189:5, 8 191:9 204:8 209:22 Four 11:11, 16 12:2, 4 59:7 92:21 98:2 102:5, 7 161:19 163:15 FOWLER 4:17 7:7 13:8, 11 16:16 17:6, 12, 20 18:22 19:13 20:19 21:15 23:1, 16 24:1, 10 25:4 28:23 29:8, 17, 20 30:2 31:9 32:5, 15, 23 33:7, 19 34:11 35:3, 12, 24 36:19 37:5, 15 38:9, 15 39:13, 22	40:10 44:21 45:9, 20 46:6 48:5 51:8, 17 53:13 54:8 56:9 57:7 58:4, 19 60:3 64:19 65:3 66:20 67:12 71:6 73:4, 15 77:1, 6, 12, 20 78:1 79:9 81:8, 18 82:3, 18 83:12, 23 85:24 86:9 87:6 88:9, 15 89:17 90:20 93:17, 24 94:14, 20 96:20 97:7 99:12 101:7 103:7, 12 104:6 108:3, 20 109:7, 18, 22 110:2 115:18 116:19 121:9 125:2 126:14, 22 128:3 130:19 132:23 133:15 135:2, 20, 23 136:9, 15 137:1, 13, 23 138:9, 17 139:16 140:10 141:6, 21 142:13 143:2 144:1, 21 145:24 147:8 148:1 149:23 151:23 155:21 157:14 163:8 164:9 165:5, 15 166:7, 22 167:20 168:17 169:13 170:8, 22 171:18 172:22	173:16 174:5, 24 176:1 177:4, 19 179:16 181:13 182:1, 22 183:5, 12 184:7 185:1 186:11 187:10, 14, 16, 24 188:12 189:10 190:9 191:3, 13, 23 192:5, 9, 12, 16, 18, 21 193:2, 8, 16, 21 194:4, 9, 21 195:4, 7 196:8, 14, 17 198:18 199:15, 22 201:3, 15, 20, 24 202:8, 12, 23 203:3, 11, 14 204:11 205:9, 22 206:1, 4 207:7, 10, 18, 19 209:3, 22 212:1, 6, 15, 24 213:14 214:14 217:1, 10, 12, 15, 19 219:3, 16 220:2, 9, 14 222:11 223:1 fowlerst@gtlaw .com 4:18 Foxhall 11:4 fraction 95:7 fragmented 115:9 Fraud 8:6 85:4 free 168:15 171:17 FREEMAN 2:17 frequency 99:2 front 25:10, 15 60:3, 12	106:6 124:6, 8 157:15 FTE 71:11 Full-time 71:12 fully 31:21 121:12 151:6 funded 75:11, 13, 24 76:4 101:6 funder 74:4 funding 65:1, 6, 13 74:7, 14, 16, 19, 22 75:14, 22 76:13 FURTHER 7:8 74:10, 13 153:7 209:4, 5 223:2 224:10, 15 future 78:24 79:1 < G > GANNON 4:22 Gateway 4:20 gcoan@hinsha wlaw.com 5:23 geared 54:5 general 116:2 124:23 125:5, 13 156:8 159:3 175:1 200:5 205:21 214:5 216:8, 9 217:5 generalization 98:5 generally 78:8 80:21 103:4 119:14 216:23 217:7 generate 127:3 generating 36:22 generation 37:21 generic 187:19	generics 178:10 generous 116:6 genotoxic 137:12 Genzyme 105:22 GEOFFREY 5:23 GEORGE 3:6 Georgia 4:12 getting 33:13 95:10 103:14 139:24 155:7 156:14 168:7 178:15 183:10 gifts 91:17 give 10:24 15:20 22:17 29:10 43:5 53:17 54:5 56:3 67:18 106:4 108:23 135:11 136:2 169:21 201:15 given 11:7 27:23 30:5, 13 34:20 35:17, 19, 21 73:13 81:4 99:16 100:13 174:7 176:4 giving 160:15 162:1 glad 29:3 GlaxoSmithKli ne 71:18, 21 77:16 105:20 glomerular 152:9 go 18:3, 4 22:4 30:17 32:6 49:2 53:24 58:18 62:21 69:14 70:21 74:12 79:3, 10 85:11 87:23 91:22 93:5 103:13 105:4,
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

10 112:6 123:5 124:20, 22 125:10 129:1 130:22 133:1 140:14 149:13 150:20 157:18 172:1 175:9 179:19 183:13 197:12 203:15 215:20 goal-directed 119:22 goes 47:11 106:9 113:2 180:11 194:12, 15 197:2, 9 going 12:15, 23 13:2 20:17 21:1 23:14 25:3, 13 27:2 29:11 33:10 40:11 58:14 59:21 75:3, 4 83:5, 16, 17 84:10 87:11 88:17 93:11 100:13 101:14 105:9 108:23 110:16 120:16, 17 121:2, 16, 17, 21 122:24 123:3, 19, 21 128:18 129:19 131:13 135:10 136:3 139:18 140:3 141:18 144:18 152:6, 7, 11 154:20 155:13 161:20 163:11 165:8 166:10 194:17	195:20 196:5 198:9 199:12 201:4, 22 202:5, 17, 18, 20 211:23 215:7, 10, 20, 24 216:20 217:4 218:3 219:24 222:18, 22 GOLKOW 1:21 6:5 10:2 203:8 Gomm 26:7 185:6 Good 10:21 26:19 130:15 132:12 156:14 191:2 205:3 216:1 218:13, 14 Gorda 3:5 GORDON 5:13 Gotcha 15:22 71:13 129:15 govern 211:13 government 83:22 85:14 86:6 90:16 96:7 113:1, 2 Government's 89:1 governs 47:17 grabs 8:11 92:4 gradient 198:14 graduated 61:14 grant 41:11, 14, 16, 19 72:12 95:4, 8 105:19 195:21 196:24 197:2, 7, 12 Granted 91:4 grants 41:2, 8, 13 65:14 70:21 72:2,	10 73:14, 22 75:9 76:24 196:19 granular 133:20 grasping 94:6 121:12 gravity 152:11 Gray 62:23 Great 11:6 25:7 175:17 greater 155:19 158:12 162:19 213:23 214:12 216:10 GREENBERG 4:9, 13 45:17 46:10 Greene 97:3 Greene's 97:1 gripe 122:5 Gross 8:13 ground 148:24 grounds 96:21 group 111:21 151:9 185:10, 21 200:23 guess 14:5 26:13 54:4 55:4 65:11 68:1 103:24 109:2 111:14 112:5, 10 122:9 127:10 148:15 220:11 guidance 137:20 guidances 137:11 guide 47:14 guidelines 199:18 guise 85:16 guys 130:18 gwilliamson@f arr.com 3:6 < H >	half 20:9, 16 21:12, 13, 23 23:9, 13 24:8 28:7 50:6 95:3, 12 163:16 204:3, 18 210:3, 21 Hammock 201:10 hand 224:22 hands 124:24 handwritten 26:10 hang 164:19 happened 74:13 180:14 222:1 happening 195:1 207:7 happens 197:8 happy 38:1 100:2, 5 125:11 hard 12:16 25:4 30:19 33:2 42:9 60:3 82:21 93:15 159:10 185:21 195:20 219:9 harder 72:13 175:8 HARKINS 4:13 harkinss@gtla w.com 4:13 harm 215:16 harmed 178:21 179:1 harmful 218:12 harms 178:6 hazardous 64:14 head 12:15 23:20 24:7, 14 222:15 header 127:19 heading 179:19	headphones 130:16 health 41:3 61:19 62:7 110:19 111:19 115:4, 9 137:11 144:13 199:10 214:5, 8 HEALTHCAR E 5:4 91:18 155:7 health-related 44:3 hear 131:6 187:10, 13 191:19 heard 180:17 hearing 38:23 hearsay 90:21 96:21 139:16 Heart 64:4 66:12 140:17, 18 heightened 151:11 HEINZ 5:12 held 10:5 help 25:6 112:10 133:4 182:8, 9 217:20 218:7 helpful 218:13 helps 175:10 hemodynamics 119:21 HENRY 3:20 hereinbefore 224:13 hereof 225:14 hereunto 224:21 heterogenous 156:2, 11 Hey 73:2 194:6 hierarchy 162:1 High 5:5 14:6 61:10
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

138:15	host 140:19	177:1, 24	identify 114:9	include 79:24
139:13 141:4	hosted 85:15	179:21 181:3	207:24	119:18
142:11 151:4	hour 51:2	184:14	III.O 148:12	121:18
163:17	58:14	190:18	162:14 184:6,	122:17, 19
198:24 209:1	hours 20:9, 16	197:16, 21, 24	13 186:4, 9	123:13 162:3,
higher 134:12	21:12, 14, 24	198:3, 20	213:8	4 205:7
163:3 164:7	23:13 24:9,	199:1 200:21	Illinois 11:2, 4,	212:13
165:13 167:5	23, 24 28:7	213:24	5 63:18, 20	included
185:12 208:20	50:6 194:10	214:11 216:6,	illustrations	32:11 39:11
highest	221:9, 13, 20	10 218:21	38:20 39:10	40:6, 21
189:24 191:11	house 73:7	hypertensive	40:3, 18	44:11, 13, 15
highlight	176:16	150:20 151:2,	images 38:21	55:10 61:5
26:19 85:11	housekeeping	10, 14 152:4	39:10 40:4, 18	116:14
highlighted	191:24 219:23	156:1, 2, 5, 7,	imminently	121:24 122:2,
16:10 17:5	HUAHAI 5:3	13 158:10, 15	201:6	4, 22 128:1
highlights	Human 8:13	160:6 162:22,	impact 162:5	148:9 159:15
26:10	143:6, 13, 24	23 179:23	172:2 177:24	includes 22:1,
highly 82:22	144:15	184:21 199:5,	179:20, 22	15 46:12, 14
89:10	167:10	8, 17 200:5	impedance	53:11, 15
Hilkert 102:9	185:14	214:6, 18	8:21 117:13	130:1
HILTON 2:10	200:12 208:16	hypertensives	119:2, 21	including
HINSHAW	humans 139:3,	150:22, 23, 24	implication	34:18 54:10
5:21	6, 24 140:1	162:18 164:6	135:5	57:20 67:16
history 110:17	143:17, 19	165:12	implications	88:3 91:17
hits 15:22, 23	165:19 185:7,	185:20 213:22	98:8	106:17
hitting 97:22	10, 13, 18		importance	108:12 139:2
hoc 69:19, 21	208:16	< I >	176:14	144:7 145:3
175:4	hundred 211:4	i.e 25:19	important	146:21
Hold 57:7, 10	hundreds	120:11	53:4 54:7, 21,	165:23 170:14
105:3 207:8	79:14 88:2	IARC 144:13	23, 24 55:1, 7,	inclusion
holistically	135:18	ICG 119:1, 5,	11 56:14, 15	105:6 120:7,
115:17	177:13	10 122:10	82:16 83:4	10, 13, 23
HOLLIS 2:14	185:19 190:24	ICG-guided	122:9, 14	121:19
home 10:24	Hypertension	118:22	148:5 152:12	inclusive
11:4	8:13, 17, 20	ID 7:13 8:2	163:5 164:5,	106:13
homework	63:13, 14	9:2	8 165:12	inconsistencies
99:3 134:7	64:2, 3, 5	identification	175:10	186:14
219:6	74:2 107:12,	13:16 22:9	206:10 208:1,	incorrect
HON 1:7	13, 18 108:1,	49:6 60:1	2	18:12
honest 82:8	10 109:6, 10,	84:14 90:3	impurities	increase
HONIK 3:6,	11 110:6	96:1 101:17	42:19 43:3,	185:15
10	111:21	117:5 124:3	17, 23 137:21	increased
honor 205:2	112:19, 20, 22	157:12	165:22	147:2 149:1
honoraria	117:13 119:6,	192:24	176:22	150:4 158:17
81:6	11, 20, 21	193:19 202:3	177:15 178:3	164:14 180:8
honorarium	148:13, 17, 19	220:5	impurity	185:19
70:6 93:14	149:4, 16, 21	identified	115:2 137:7	200:11
hope 94:7, 13,	150:16 151:4	145:22	inaccurate	213:11, 12
16 97:23	155:18 158:2	identifies	77:18 126:2	215:18
132:16	160:3, 8, 11	98:17	incidence	independent
	163:1 172:2		145:3	147:2 166:20

172:10, 15 173:24 174:13 Indiana 4:5 Indianapolis 4:5 indicate 152:9 indicated 225:13 Indicating 12:8 213:10 indication 113:23 200:24 indicator 152:21 indirect 197:6 Indirectly 107:15 224:19 individual 66:24 117:22 177:12 181:18 182:10 190:24 individualization 119:22 Individualizing 8:20 117:12 individuals 97:6 158:1 Induce 8:8 141:11 induced 105:7 INDUSTRIES 4:9 industry 66:7 175:8 industry-sponsored 197:7 industry-supported 70:13 infeasible 168:14 infection 153:12 inference 97:17 infinitely 87:10 inflammation 9:11 201:10	influence 137:8 influenced 86:23 95:10 INFORMATIO N 1:9 15:6 26:17 33:2 43:6, 7 48:9, 10 106:4 134:15 195:13 205:1 207:15 208:1, 6, 9, 13 informed 175:16 infrequent 89:6 INGERSOLL 3:11, 18 ingredients 112:15 inhibitor 75:1 104:11 inhibitors 113:15 initial 8:15 74:16, 18 151:18 Initially 119:7 188:8 197:24 innuendo 99:19 input 17:16 inquiry 126:18 127:24 insight 171:21 insinuating 132:12 insinuation 87:14 instance 210:2 instances 11:17 12:3, 4 Institutes 61:18 institution 114:16 instructor 62:8 instruments 206:17	insufficient 132:2 190:16 intake 146:7 199:4 intakes 108:8 intensely 155:12 interest 105:13 114:18 203:17 204:6 205:12 206:6, 11 209:21 210:15 219:2 interested 66:10 70:19 81:12 224:19 interests 64:16 interface 82:23 interfaced 175:15 interfacing 89:11 interim 24:21 135:1, 19 146:7 168:5 internal 61:14 63:24 91:11 92:20 94:3, 18 134:1 175:21 210:9 211:6 internally 136:23 internet 119:10 175:13 interpret 38:4 58:1 160:9 interpretation 47:12 159:14 interpretations 51:23 54:12 interpreting 37:24 intersect 199:3 intervals 123:18 interventions 118:8	intimately 107:19 110:5 211:5 introduce 157:8 193:22 194:2, 23 introduced 203:1 invalidate 55:16 invasive 215:13 invest 75:4 investigate 182:7 investigation 172:9 investigative 154:10 investigator 197:13 investigators 161:19 197:6 investing 83:2 Invoice 7:17 9:11, 13 18:10, 24 19:2 20:8, 16 22:14 23:7 24:17, 23 25:3 50:1 202:19 219:24 220:19 221:4, 15 invoices 18:7, 13, 14 19:6, 11, 15 25:21 involve 64:17 involved 12:6, 18 44:5 45:4 176:9 178:9 IRBESARTAN 1:4 10:6 178:8 225:5 IRIS 2:16 iris@hollislawfi rm.com 2:16 irrelevant 28:18 127:5	irrespective 28:21 issue 37:23 67:19 131:19 148:3 204:5 206:12 issues 59:11, 16 113:22 Item 30:11 129:24 items 10:23 14:14 33:17, 22 34:2, 6 59:5 70:13 107:1, 13, 24 130:1 iterations 53:24 its 28:21 29:14 32:3 39:12, 21 40:5, 20 44:11 IX 183:22 184:1, 4, 18 186:8, 23 187:2 < J > janitor 222:5 JASON 5:18 8:13 jdavis@slackda vis.com 2:6 JERSEY 1:1 2:20 4:21 JESSICA 5:12 jheinz@c- wlaw.com 5:13 Jill 8:13 JMF 105:16 jmr@pietragall o.com 5:18 job 161:9 JOHN 1:11, 14 2:6 7:4, 15, 19 8:22 10:8, 15, 21 98:17 225:18 226:24 227:24
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

joined 68:6	KARA 4:6	know 13:11	laappel@duane	led 51:23
JONES 3:15	KATZ 2:17	18:23 21:10,	morris.com	154:10
Journal 8:13	keep 19:10,	24 24:13	5:7	left 61:17
9:10 56:21	11 20:5 25:3	47:6 53:22	Laboratory	131:13 185:16
112:20 122:3	31:16 71:6	54:22 56:21	188:16	leg 180:2
160:14 201:8	123:7 156:5	70:8 72:11	Lack 29:22	legalese 130:9
203:22 204:1,	182:11 183:2	76:10 84:4,	30:3 96:21	legitimate 76:5
15 206:9, 12	209:20	17 87:9 89:4,	99:13 101:7	letter 43:3
207:5 209:9	kept 19:9, 20	8 93:12 95:9	176:2 206:14	level 14:6
210:6, 8, 16,	222:16	97:11 102:9	lacks 126:14	134:11
20 211:1, 14,	key 145:8, 21	103:17 107:4	128:4 136:9	143:15 150:3
17, 18 218:21	keywords	113:24 114:7	laid 186:15	151:7 163:1
journals	15:14, 17	122:10, 12	Lane 11:4	167:2 168:11
209:19 210:1	119:20 120:12	124:6 130:6	Lang 210:10	181:18
211:4, 6, 9	kicking 168:10	134:7 137:6	Langston	182:10 189:3
journal's	kidding 84:2	143:14 144:3,	61:11	190:11, 16
211:13	kidney 149:18,	16, 19 149:12	language	191:12, 15
judgment	20 150:4, 6,	150:9 153:2,	132:11	197:11, 19, 22
176:15	16 152:10, 22,	3 155:23	large 111:4	198:1, 9, 15,
jugs 179:5	24 153:1, 15,	161:20	115:3 204:24	21 200:6
Juliana 1:17	16 154:3	163:10	largely 127:4	201:1 208:14,
224:3, 24	198:7, 10, 16	164:14 167:8,	larger 97:8	19, 20 209:1
July 7:17 8:4	213:8, 11, 19	9, 10 171:2	LAUREN 5:7	213:19
9:13 20:10,	215:11 216:5	173:19 175:3,	LAW 2:14	levels 134:10,
15 21:12	kidneys	8, 14 180:2, 5,	3:4 73:6	16 135:18
22:1, 15, 23,	153:22 215:13	12 182:18	91:16	136:24
24 23:4, 7, 8	kidney's	185:11	Lawsuit 8:6	163:12, 17
50:16, 21	152:12	186:20	85:4, 9, 13	165:21 167:4,
51:1 85:1	kilogram	190:19, 22	87:16, 21	5 170:13
92:15 220:21	139:4	191:1, 7	lawsuits	185:22 189:1,
jump 58:16	kind 12:15	194:14	178:17	8 191:8
jumped	45:18 48:22	202:14 207:7	lawyer 73:7	198:24 199:4
167:14	70:5 87:21	216:19 217:7	lawyer's 130:6	213:11
juncture 151:8	97:22 112:14	218:1, 10, 12	layers 139:1	214:24
June 22:21,	114:7 116:16,	222:2, 5	LAYNE 2:10	216:12, 13
22, 23, 24	17 118:20	knowledge	lead 158:3	LIABILITY
23:3 49:20,	121:7 146:6	52:14 85:10	214:17	1:5 10:7
21 50:22	156:11	89:8 172:19	leading	225:5
60:16	158:16	182:24 183:1	187:23	liberty 44:4
Justice 8:3	164:23	195:22 210:10	190:20 208:22	lifestyle
84:22	173:21	known 108:6	leads 174:1	107:16, 20
justified	179:12 184:2	174:10	learn 212:4	109:11
101:12	205:2 206:22	knows 66:22	learned 195:17	lift 195:5
	kinds 42:12	181:20	learner 26:17	light 25:9
< K >	162:23	KUGLER 1:7	learning 48:9	75:1
KANNER 2:6	kkapke@btlaw.	< L >	leave 54:20	likelihood
Kansas 2:15	com 4:7	l.hilton@kanne	55:6	121:17
KAPKE 4:6	knew 86:13	r-law.com	lecture 82:9	Limit 137:21
44:22 191:18,	212:17	2:11	lectures 67:18	168:1 169:6,
22	knocks 195:20	LA 6:2 10:2	86:18 100:18	22 170:1, 3

limits 135:1, 19 146:7, 10, 12 168:5, 7 182:5 line 94:4 100:10 131:24 161:6 link 109:16, 20 149:6 193:23 202:10 linkage 115:7 213:8, 10 linked 109:12 111:6 150:3 151:3 162:24 199:7 List 8:22 9:5 36:12 44:15 51:14 55:20 57:1, 24 83:6 87:12 107:2 124:10 125:11 127:21 129:24 131:14 136:11, 17 138:7 148:22 154:18, 21 171:7 188:14 192:2 193:4 194:7, 14 196:3 207:12 216:18, 23, 24 217:2, 8 219:9 listed 36:8, 18 38:14 41:13 50:19 56:2 77:8 92:18 102:12 127:10, 18 144:3, 4, 14 151:19 171:11 195:10, 15, 23 199:2 206:20 221:13 Listen 29:1 86:18 164:19 listened	211:20 lists 92:8, 11 literally 160:6 literature 55:15 56:12 101:4, 22 115:16, 17 116:3 119:8, 15 121:16 128:20 145:2, 3, 5, 8, 21 146:21 147:14 150:15 LITIGATION 1:5, 21 6:5 10:3, 7 12:7, 18, 21 25:20 38:24 44:20 46:16 52:13 59:12, 15, 20 60:22 61:3 64:17 78:21 131:19 132:5 145:4 187:1 204:4 205:5 225:5 little 41:8 74:13, 14 103:11 107:21 111:11 131:9 167:14 191:24 198:4 liver 116:8 138:21 143:7 living 96:17 LLC 2:6, 17 3:6, 11 4:9 5:4, 9 72:22 LLP 2:4 4:3, 9, 13, 20 5:5, 16, 21 72:22 loaded 203:8 loading 201:13 located 62:1 locations 91:22 112:9 log 20:9 logged 19:20 20:16 logical 186:15	long 121:5 172:20 longer 66:4, 5 68:3 76:10 183:3 longitudinal 114:13 look 34:17 53:24 54:3 71:17 73:21 74:12 97:1 99:2 110:12, 20 112:18 114:2 129:22 131:17 152:7, 11 157:2 185:5, 6, 10 199:17 200:23 208:16 222:7, 8 looked 30:18 176:5, 11 208:3 Looking 64:24 70:1 84:5 112:6 114:21 119:17 122:4, 21 123:6, 7 152:15 153:15 154:1 160:7 161:22, 23 165:9 175:13 194:6 209:17 215:4, 13, 23 looks 96:12 113:10 LOSARTAN 1:4 10:6 178:9 225:4 lot 65:1 67:1, 11 69:1 72:13 82:2 113:5 120:17 139:24 151:2 167:9 190:14 199:1 208:4 Lotrel 75:24	lots 178:2 Louisiana 2:9 low 108:7 215:5, 8, 17, 23 lower 154:17 163:18 191:7 lowered 103:22 lowers 105:5 lunch 92:15 130:17 lunches 91:19 < M > M.D 7:19 8:22 M.P.H 7:19 M7(R1 137:19 MACP 1:11, 15 7:4, 16, 21 10:16 225:18 226:24 227:24 Madam 192:5, 18 193:12, 21 194:22 magic 21:18 magnitude 159:17 maintain 60:23 maintained 60:21 210:16 major 61:12 majority 197:1 making 86:24 87:14 97:18 98:4 104:17 113:18 126:5 174:23 177:15 179:1 malignancy 154:5, 8, 16 malignant 154:4, 14 malpractice 11:21 12:1, 5 59:8 Manhattan 8:5 manner 89:10 162:10 189:7	manufacture 168:15 171:17 manufacturer 44:19 80:12, 14 101:11 132:19 170:6 171:7 173:20 208:19 manufacturers 126:13 128:2 134:14 166:13 168:15 170:20 171:16 172:19 173:10 174:16 175:21 191:5 208:11 manufacturing 166:16 168:22 169:1 171:21 176:7, 10 187:19 188:23 manuscript 102:13, 16 mark 12:24 13:2 22:4 49:2 59:21 84:10 95:21 101:14 117:1 123:21 192:1, 2, 10, 12 193:8, 11 196:9 201:4 202:18 219:24 MARKED 7:13 8:2 9:2 13:15 22:8 25:24 26:23 32:2 49:5 59:24 84:13 90:2 95:24 101:16 117:4 124:2 131:15 157:11 192:7, 23 193:18 194:8 196:11 202:2, 20
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

207:12, 20 209:10 217:24 220:4, 7, 17 Market 3:9 168:10 169:17, 19 178:8 marking 22:5 49:2 89:23 117:2 123:23 201:22 202:6, 17 mass 154:13, 14 Massachusetts 5:6, 22 massage 153:11, 13 masse 33:24 masses 153:15, 22, 24 154:2 Master 110:19 material 9:8 137:15 171:4 173:11 193:10 195:23 208:24 Materials 8:24 9:5 50:10 52:12 53:3 55:20 56:6 57:1, 16 123:21 129:8, 10, 11, 12 131:14 138:7 171:6 188:14 192:3 194:7 196:4 207:11, 17 216:18 217:8 math 61:12 MATTA 6:2 Matter 10:6 31:16 44:3, 18 45:16 140:17, 18 196:5 199:9 206:18 219:23 225:11 max 163:16	maximum 134:3, 16 MAZIE 2:17 MD 1:11, 15 7:4, 15, 21 10:16 225:18 226:24 227:24 MDL 1:4 125:4, 13 meals 88:3, 13 mean 45:12 47:19 50:14 52:21 92:19 93:14 102:21 115:14 129:14 134:24 147:15 149:9 155:14 160:19 164:23 168:24 171:3 176:15 177:17 179:7 181:3 202:6, 7 215:19 217:20 meaning 72:15 120:11 meaningfully 102:15 means 56:24 71:11 85:18 150:9 181:2 203:9 meant 72:5, 8 86:8 204:12 205:15 measure 71:13, 15 measured 189:3 media 33:17 medical 11:20, 21 12:1, 5 52:14 59:8 61:13 62:14 146:20 147:13 155:19 158:2, 15 195:19	197:4 213:23 214:12 216:11 medicated 149:3 162:24 medicine 61:14, 16 62:8 63:24 64:1 156:3 190:2 195:18 210:9 211:6 216:3 medicines 151:1 Medline 119:9 meet 120:3, 6 meeting 50:10, 11 212:21 Melissa 8:10 91:2, 14 mellitus 108:7 member 61:21 69:10 134:8 175:5 memory 21:6 24:24 26:19 28:11 30:22 92:18 221:15, 17, 18 mention 67:9 mentioned 48:19 65:24 109:21 110:16 116:12 124:9 152:17 153:22 213:7 mentor 76:20 menu 154:6 Merck 76:23 105:20 mercy 204:23 Meridian 4:5 met 143:6 meta-analyses 159:15 160:11 meta-analysis 8:21 9:5 117:14, 21 118:1, 5, 6 119:5 122:14	method 221:12, 13 methodology 160:22 methods 52:13 Michael 111:20 Michigan 96:17 microgram- per-kilogram 140:1 163:20 micrograms 189:17, 21 microgram-to- kilogram 138:23 microphone 187:12 mid 97:15 98:24 99:11 MIDAS 76:17 middle 204:17 Million 8:5, 8 85:4 95:4, 12 204:3, 18 210:3, 21 millions 73:13 88:2 mimic 111:10 mind 81:16 86:18 165:2 192:13 201:13 mine 114:18 176:8 minimal 128:7 minimally 113:19 minimize 211:2 minimizes 105:7 minimizing 180:21 minimum 83:11 100:1 Minneapolis 62:2 91:23 Minnesota 61:18 62:1, 11, 17, 18, 21	76:19 91:16 93:11 minor 61:12 minutes 58:19 93:15 130:21 183:11 212:22 Miscellaneous 129:22 mischaracteriz ation 218:9 mischaracteriz es 67:12 133:15 137:13, 23 165:5 174:5 mischaracterizi ng 24:10 28:11 30:2 104:6 144:1 176:2 182:2 213:1, 14 misleading 104:19 missed 54:7 122:1, 6 146:3 147:16 148:4, 6 176:14 mistaken 177:23 misunderstandi ng 162:17 mock 69:8, 13 models 138:20 139:21, 23 163:19 167:7, 9 208:15 moderate 159:17 modification 107:17 modifier 13:3 moment 69:20 73:11 money 79:8, 18 82:2, 16 83:5, 11 84:6 95:6, 7 196:23, 24 197:1 205:4
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

monotherapy 8:17 103:6 104:1	Myogen 105:22	163:12, 14, 23 164:13, 21	100:13 136:7, 17 137:5	nomenclature 192:13
month 22:22, 23 23:9 24:7 49:20	myriad 128:22	165:23	156:4 210:2	non-
months 23:3	< N >	166:18 167:5	nevertheless 76:12	cardiovascular 199:21 214:9
morning 10:21	N.W 3:14	168:11, 22, 24	NEW 1:1 2:9, 20 4:21 8:4	nonexistent 167:12
morphed 67:6	4:16	169:18 170:1, 4, 21 171:1, 12 172:6, 11, 19 176:21	21:11 90:9	non-
MORRIS 5:5	name 10:2, 21	177:9, 14	186:23	hypertensive 199:6, 20
mortal 121:4	53:9 63:11	179:2, 14	Newark 4:21	non-
mouth 116:1	91:2 96:13	180:1 181:6, 23 182:5	news 180:18	hypertensives 156:9
move 38:1, 8 42:16 58:13 59:5 100:3, 5, 6, 22, 23	98:2, 12, 16, 19 132:16	184:17	newspaper 180:18	nonresponsive 140:4
140:3 205:16 211:24	names 91:10	185:22	NHANES 111:19	non-trace 136:3
moved 62:9, 24 196:12	narrative 61:8	190:17, 23	112:18, 23	Nope 97:4
Moving 36:5 140:11	narrow 176:4	200:7 208:7, 20	nifedipine 180:10	Nordisk 77:24
MPH 1:11, 15 7:4, 15, 21 8:22 10:16 61:20 62:6, 9, 10 110:18 225:18 226:24 227:24	narrower 123:18	NDMA/NDEA 146:22, 23	nitro 35:22	normal 153:3
MRI 153:15	National 8:11 61:18 81:1, 5 87:5 88:12 91:20 92:4 111:19	NE 4:11	nitrosamine 42:19 43:17, 23 173:12	North 3:19 11:3
MSP 76:23	nationalized 115:4	near 87:12	nitrosamines 34:21 35:18, 20, 23 41:3, 10, 12, 14, 23 42:1 59:17 64:17, 22 78:8, 22 107:3, 10 145:7 163:24 166:5 167:18 168:16 169:11 171:17 179:11 182:21 184:22	Notary 225:24
Mulberry 4:21	NDEA 78:7, 22 107:3 131:18 132:3, 21 133:14 143:12, 14, 24 144:14 146:8 147:1 164:21 170:21 172:6, 11 176:21 177:9, 15 179:14 181:6, 23 184:17	need 21:22 36:24 88:20 99:2 160:21 171:20 190:17 191:7	nitro 35:22	noted 10:9 140:13 196:14
multiple 116:13 128:9 132:14 152:14 162:22, 23 166:12, 14, 17 170:24 171:2	needed 61:5 69:2 136:18 178:3 187:3 197:3 208:9	necessary 166:5	nitrosamines 34:21 35:18, 20, 23 41:3, 10, 12, 14, 23 42:1 59:17 64:17, 22 78:8, 22 107:3, 10 145:7 163:24 166:5 167:18 168:16 169:11 171:17 179:11 182:21 184:22	notes 20:18 25:19 26:10 34:18 183:10 221:16, 18, 21 222:19
multiply 100:15	NDMA 14:12 15:10, 13, 18, 19, 24 27:5, 13 78:7, 22 107:3, 10 115:2 116:4 124:15 131:18 132:3, 14, 21 133:14, 19 134:10 135:14 136:24 139:7 140:2 143:12, 14, 23 144:14 146:8 147:1	needless 91:18	nitro 35:22	Notice 7:15 12:24 13:7, 23 14:3 16:8 32:4 33:18 222:9
mutagenic 137:12, 21		needs 153:5 167:24 209:20	nitrosamines 34:21 35:18, 20, 23 41:3, 10, 12, 14, 23 42:1 59:17 64:17, 22 78:8, 22 107:3, 10 145:7 163:24 166:5 167:18 168:16 169:11 171:17 179:11 182:21 184:22	noted 10:9 140:13 196:14
mute 73:2		nefarious 104:19	nitro 35:22	notes 20:18 25:19 26:10 34:18 183:10 221:16, 18, 21 222:19
MYLAN 5:13 137:5		negative 161:7	N-nitro 141:4	Notice 7:15 12:24 13:7, 23 14:3 16:8 32:4 33:18 222:9
Mylan-		neither 112:1 224:15, 17	N-nitroso 138:15 139:12 142:11	noted 10:9 140:13 196:14
produced 136:7		Nesbit 3:4	No._____Chan ge 226:2, 5, 8, 11, 14, 17, 20 227:2, 5, 8, 11, 14, 17, 20	notes 20:18 25:19 26:10 34:18 183:10 221:16, 18, 21 222:19
Mylan's 136:22, 23		never 35:19 41:14, 19, 24 45:2 46:8 60:23 64:10 76:10 78:9 80:2, 5	No._____Line 226:2, 5, 8, 11, 14, 17, 20 227:2, 5, 8, 11, 14, 17, 20	Notary 225:24

98:7, 24	Objection	167:20	occasions	39:3 40:24
99:10, 23	16:16, 17	168:17	11:12	41:7, 15 42:2,
101:6 102:6,	17:6, 12, 20	169:13	occupational	15 43:13, 21
12, 18 105:20	19:13 20:19	170:22	113:21	44:8, 17 45:6
Novartis's	21:15 23:1,	171:18	145:16 146:22	46:2, 12, 15,
88:6	16 24:10	172:22	occur 154:18	23 47:3, 7, 21
Novo 77:24	28:23 29:8,	173:16 174:5,	166:16	48:14 49:12,
NPCLSV_LIT0	17, 20 30:2	24 176:1	occurred	17, 23 50:8,
02333074 8:11	31:9 32:5, 15,	177:4, 19	11:13 46:4,	14, 19, 24
NPCLSV_LIT0	23 33:7, 19	179:16	10 76:18	51:14 52:8,
03753068 8:13	34:11 35:3, 7,	181:13 182:1,	o'clock 183:14	21 54:15, 20
nuanced 166:2	12, 24 36:19	22 183:5	October	55:18, 24
number 20:17	37:5, 15, 16	184:7 185:1	224:22	57:15, 22
23:15 24:9	38:15 39:13,	186:11	offer 29:11	58:11, 18
46:23 56:4	22 44:21	187:22 189:5	166:10 225:15	59:4, 10, 16,
72:14 90:12	45:9, 20 46:6	190:20 191:9,	offered 52:17	21 60:7, 10,
100:15, 18	48:5 51:8, 17	17 196:2, 6,	Offhand	19 61:2, 6, 22
118:21	53:13 54:8	14, 16 198:11	14:21 47:5	62:3, 12, 16,
132:19 144:6	58:4 64:19	204:8, 12	120:15	20 63:1, 7, 11,
150:12 156:1	65:3 66:20	205:15, 22	Office 8:3	16 64:7, 12,
159:16	67:12 73:15	208:22	official 84:21	24 65:17, 24
192:13	77:12, 20	209:22 212:1,	oftentimes	66:17 67:9
198:13, 23	78:1 79:9	6, 15, 24	67:3	68:12 69:16
205:12	81:8, 18 82:3,	213:14	Oh 63:16	70:5, 11, 21
numbered	18 83:12, 23	214:14 217:1	100:20	71:13, 21
118:12	85:24 86:9	219:3, 16	103:10	72:1, 17
numbers 72:2	87:6 88:9, 15	220:2 222:11	110:12, 13	74:10 75:8,
nurses 197:4	89:17 90:21	Objections	202:24 207:7	23 76:4, 12,
Nutrition	93:17, 24	7:14 35:4	212:17	22 78:11
111:19	94:14 101:7	130:3 188:6	Okay 11:12,	79:17 80:11,
< O >	103:7 104:6	observation	16 12:6, 11,	16 81:1, 6
oath 11:7	108:3, 20	150:8	20, 23 13:10,	84:20, 24
225:16	109:7, 18	observational	22 14:1, 13,	85:22 86:5
obesity 108:7	121:9 125:2	9:5 111:4, 15,	19, 22 15:4, 8,	87:20, 23
199:3	126:14, 22	16, 18, 22	12, 16 16:2, 4	90:14 91:4,
Object 38:9	128:3 132:23	112:9, 13	17:3, 10, 17	10, 14 92:7,
39:24 40:10	133:15 135:2,	118:7 120:21	18:9, 16 19:5,	14 93:5, 21
44:22 56:9	20, 23 136:9,	179:9	18 20:8, 15	94:9 95:4, 8,
57:7, 8 96:20	15 137:1, 13,	observations	21:9 22:17,	21 96:5, 11,
97:24 98:13	23 138:9, 17	113:6, 18	24 23:12, 23	16, 19 97:5,
99:12 115:18	139:16	observe	24:6, 17 25:2,	14 98:21
116:19 140:3	140:10, 11, 13	112:13	9, 13, 15, 18, 23	99:4 101:3,
141:23	141:6, 21	observing	26:6 27:1, 11	20 102:1, 5,
144:21	142:13 143:2	112:2	28:1, 12, 13	17, 23 103:16,
172:22	144:1 145:24	obvious 137:6	29:24 30:8,	19 104:3
199:12 205:16	147:8 148:1	147:10	15 31:6, 19	105:12, 16, 18
objected 39:4	149:23	obviously	32:13, 21	106:1, 5, 15,
42:6, 22	151:23	155:12	34:2, 17, 24	21, 24 107:11
objecting	155:21 163:8	162:16 193:23	35:17, 21	108:14 110:8,
136:23 189:8	164:9 165:5,	occasionally	36:5, 16	15 114:6
	15 166:7, 22	72:14	37:23 38:7	116:15, 24

117:17, 20 118:11, 18 119:3, 19 120:7, 10, 22 122:2 124:20 125:16, 20 127:9, 15, 22 128:13, 18, 24 129:5, 15, 22 130:14, 18, 20, 21 131:8, 13, 22 134:22 135:18 136:14, 21 137:10 138:5, 13 140:22 143:8, 16 144:4 145:13, 20 147:12 148:12 150:11 152:20 153:7 156:18 157:6, 16 160:2, 9, 18 161:11 168:9 171:6 172:1, 4 173:24 178:13, 20 179:5 180:2, 10 181:1, 22 182:14, 20 183:24 186:22 187:6, 7, 14 192:21 193:16 194:17 195:4 196:8, 13 199:23 201:14, 17, 18, 22 202:5, 7 203:11, 13 204:11 206:3 207:9, 18 209:7, 19 216:18 218:2, 18 219:14 221:7, 21 222:1, 18	Oklahoma 61:13 62:6, 13 68:7 once 53:17, 21 54:2 75:12 178:14 oncologist 181:4 oncology 64:8, 9, 11 ones 16:11 43:15 47:6 71:10 129:2 214:13 216:7 ongoing 54:1 68:17 114:15 199:10 online 180:17 open 22:6 opened 202:13 Operating 8:7 85:5 opinion 47:10 52:16 128:11 132:1, 20 134:23 135:22 145:20 146:6, 9, 14 149:19 159:6 166:4, 10 171:22 172:21 173:15 175:16 186:17, 18 191:8, 14 195:10 198:19 205:17 opinions 36:7 44:9 47:8, 9 48:1, 15 51:7 52:11, 18, 21, 22, 24 53:2, 5 55:7 57:6 58:3 184:5, 14 186:4, 8 189:4 195:14 204:20 208:2, 11 opportunity 175:20 199:24	opposed 69:19 126:12 128:1 184:21 194:15 202:10 options 165:2 ORDER 1:9 114:10 140:12 151:15 152:16 208:11 ordered 215:12 ordering 152:3, 5 O'REILLY 4:20 Organization 144:13 organizations 66:12, 13 Original 8:19 217:16 Orleans 2:9 Ostendorf 8:10 91:2 ought 100:11, 21 outcome 224:20 outcomes 122:21 165:8 outlier 122:11 outline 130:16 output 186:8 outset 124:9 outside 43:8 44:4 46:4, 9 60:22 64:16 67:3 78:21 80:5 115:10 170:22 176:1 overall 116:7 145:15 197:12 Overland 2:15 overlooked 210:12 overnight 193:13 oversight 218:23 219:19	overweight 150:23 owned 76:8, 9 owner 72:21, 22, 24 ownership 133:3 206:15, 16 Oxford 5:16 < P > P.A 3:4 P.C 5:9 p.m 131:2, 3, 4 183:14, 17, 18 223:4, 7 packaged 168:23 PAGE 7:3 25:16 52:9 70:22, 23 71:4 73:23 74:11 75:23 76:6, 16 85:11 87:23 97:2 106:8, 9 118:12 127:16, 19 128:13, 18, 19 129:17, 18, 23 130:5 131:23 144:23 145:22 146:15 149:17 157:19, 20 183:23 188:15 194:12 197:15 201:21 203:16, 18 226:2, 5, 8, 11, 14, 17, 20 227:2, 5, 8, 11, 14, 17, 20 Pages 129:6 Paid 8:7 70:9, 10, 17 72:10 82:2 83:11	84:4 87:12 100:16 panel 69:11, 13 175:5 panels 69:8 Panigrahy 201:11 paper 105:24 106:3 112:19 145:11 160:17 213:16 papers 56:20 160:15 162:8 paragraph 52:10 132:1 146:16 147:5 159:13 161:10 197:15, 18 parallel 75:4 205:6 parameters 152:14 paraphrasing 103:3 parentheses 72:3, 6 parenthetical 71:22 72:5 Park 2:15 Parkway 2:20 5:11 part 16:8 24:22 30:10 33:10 60:21 67:9 72:24 82:13 110:16 111:4, 17 144:19 150:2 151:18, 21 161:6 167:15 179:9 197:23 217:19 partial 72:22 partially 72:17 75:13 109:15 151:5 participants 72:11
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

participate 50:10, 11 102:15	214:4, 6, 11, 18, 23, 24 215:12 216:6, 10, 15	percentage 197:12	Pharmacology 9:10 201:8 209:9 210:16	15 22:5, 8 49:3, 5 59:24 84:13 89:24 90:2 95:24 101:16 117:4 123:24 124:2 157:11 192:23 193:11, 18 202:2 220:4, 7
participated 69:22, 23 78:6, 9, 12	patterns 86:23 pay 94:5 127:14 131:20	perfect 169:23 perfectly 28:19	pharmacology/t oxicology 136:22	PLAINTIFFS 2:3 3:3 7:14 56:5 130:1 132:4 145:4 186:24 192:8 193:3 202:7 204:4
participating 67:23 68:5, 9	payment 70:6, 15, 20 81:11 206:17 210:5, 21	performed 41:22	PHARMACY 4:3	plaintiff's 192:11
participation 82:17 88:19	payments 81:7	period 24:21 82:2 85:23 99:24 115:6	phenomenon 157:23	Plaintiffs- Exhibit 220:17
particular 26:18 30:6 48:10 117:17 149:22 210:24	payor 93:21 PC 3:11, 18	Periodic 129:6	pheochromocyt oma 215:9	Plaintiffs- Flack 201:5, 24
particularized 45:15	PDF 202:11, 12, 13 203:7, 10, 18	person 26:13 42:19 43:2, 10, 19 116:6	Philadelphia 3:9	Plaintiff-X 192:8
particularly 116:8 138:21 163:6 197:7	PDFs 31:3	personally 13:22	phone 43:11	plans 78:20
PARTIES 2:1 3:1 4:1 5:1 10:9 224:17	peer 106:13, 19 195:21	personnel 102:13 197:3	phrase 47:22 132:13	plausibility 148:19
party 12:7, 18	peer-reviewed 106:11, 18 107:1, 13, 24	persons 158:4	physical 30:18 31:7, 16, 17 32:1, 3, 8, 10 107:17 108:8 199:4	plausible 144:9 163:23 185:17
pass 187:8	PENALTY 225:7, 9	perspective 65:5 81:13	physician 151:13 154:11 210:7	play 21:4
patient 43:7 44:3 153:8 181:18 182:10 190:24 199:8 200:18 215:17	pending 71:1 Pennsylvania 3:9 5:11, 17	perspectives 160:21	Physicians 211:8	player 61:12
patients 8:17 43:8 79:20, 23 80:1 113:10 114:13 151:2, 10, 15, 22 152:4 155:18 156:3, 5, 7 162:23 172:3 176:20 177:1, 8, 24 178:2, 3, 7 179:13, 21, 23 180:4, 10, 15 181:7, 24 182:16, 20 183:2 184:20 185:8 190:18 191:1 198:20 199:1, 6, 10, 17, 20 200:5 213:22, 24	people 43:10 44:5 68:21, 22 84:5 113:4, 12, 14 125:23 134:9 149:8 150:4 154:19 155:5, 10, 11, 13, 15 156:12 158:14 162:18 163:6, 15 169:20, 21 170:10 176:6 177:13 178:15, 20 180:12, 16 182:9 185:10 189:24 190:1 200:21, 22 204:24 215:15 218:11	pertained 94:10 Pfizer 77:11, 14 105:20 ph 1:23 PHARMA 4:9 5:9 91:16 102:18 PHARMACEU TICAL 4:7 5:3 65:2, 7, 13 66:7, 15, 18 67:4, 17, 24 68:9, 13, 15 69:17, 21 70:12 79:4, 19 89:11 204:19 205:13 PHARMACEU TICALS 4:9 5:13, 20 8:6 66:14 137:21	pick 27:10 121:15 piece 116:17 Piedmont 4:11 PIETRAGALL O 5:13 pill 167:2, 4 189:20, 24 pills 133:19 134:11 135:14 200:15 Pittsburgh 5:17 PIZZI 4:20 place 91:22 161:24 224:12 places 61:21 placing 216:9 plaintiff 15:1, 3 56:4 127:11 129:17 PLAINTIFF- FLACK 7:13 8:2 9:2 13:4,	playing 185:23 Pleadings 125:4, 13 please 10:11 195:6 201:13, 21 plenty 52:5 158:14 176:12 178:8 208:13 PL-Flack 13:3 point 53:22 55:16 67:21 80:9, 17 109:4 126:4 130:16 164:12

174:18, 19, 21 214:21 216:21 pointed 148:5 points 197:12 police 173:5 pool 123:15, 16 pop 120:17 121:3 201:16 pops 123:8 popular 86:21 87:4 population 113:4, 7 150:21 155:20 156:2, 9 162:18 199:9 200:18 population- based 112:21 populations 115:10 162:22 portion 70:22 75:9, 10 79:22 85:12 portions 73:22 posit 148:16 184:16, 19 position 35:5, 10, 11, 15 164:19 167:18, 23 positive 104:17 123:8, 9, 10 133:24 161:7 209:11 215:6, 24 positives 215:7, 24 possession 23:15 221:23 possibility 121:8 possible 18:20 54:17 possibly 192:4 post 134:10 post-academic 62:4, 5 post-doc 62:10	postdoctoral 61:19 76:19 posted 133:18 Post- Marketing 129:5 potency 138:16 139:14 141:5 142:12 potential 78:13, 16 137:22 143:13, 23 153:5 154:5 160:18 161:1 162:10 170:13 173:12 198:24 205:8 206:20, 24 215:20 potentially 41:4 148:21 152:21 153:24 165:3 171:1 178:18 200:15 206:18 218:13 Pottgard 26:6 185:5 PowerPoints 34:19 38:21 39:10 40:4, 18 practice 42:13 63:7, 9, 12 118:5 154:19 180:5 182:15 199:19 213:21 214:1 216:2 practicing 111:14 practitioner 66:24 67:3 180:11 practitioners 91:18 pre 121:7 precise 123:17	precision 53:8, 10 preclude 55:13 predict 78:23, 24 predominantly 143:7 preemptively 219:9 premier 112:19 premise 51:24 prepare 50:10 prepared 20:15 60:19 preparing 16:5 17:10 45:6, 7 47:15 136:8 pres 200:18 Prescribe 8:9 88:5 prescribed 200:19 prescriptions 67:1 190:2 presence 46:4 152:17, 20, 23 163:1 166:4 PRESENT 6:1 65:21 66:1 194:24 220:17 presentations 34:19 35:17 presented 103:8 preset 120:11, 14 president 64:4 Press 8:4 pressure 9:4 105:6 111:24 150:3 151:7 163:2 197:22 198:1, 2, 4, 9, 15 213:11, 19 214:24 216:12 pretty 26:16, 19 28:8 37:1, 9 51:21	65:15 66:22 75:15 82:20 93:4 95:17, 18 124:19 132:12 134:8 137:6 144:16 147:10 158:9 175:16 191:2 211:16 216:1 prevalence 215:6, 8, 17, 23 prevent 121:17 previous 57:16 82:22 194:16 previously 49:19 57:21 59:13, 18 92:24 107:9 128:21 158:10 192:1 primarily 83:6 86:21 primary 75:21 81:16, 24 102:1, 3 114:16, 19 principle 216:9 principles 52:15 118:10 215:22 PRINSTON 5:3 print 27:18 29:6 printed 26:14, 23 27:15, 17 28:2 29:15 30:1 49:10 printer 27:17 printing 84:6 prior 50:21 54:5 120:14, 23 157:19 209:12 224:5 priori 121:19 private 63:7 privilege 212:7	privileged 43:5 44:1 privy 94:3 174:8 pro 153:17 probability 154:17 158:12, 17 probable 144:4, 14 probably 22:21 60:13 62:18 68:1 69:1 74:17 75:20, 22 83:7 86:20 97:19 106:12 133:6, 9 142:7 163:18 175:9 189:21 190:12 192:10 215:19 217:23 221:11 problem 33:13 113:12 131:11 134:21 153:5 154:5 178:12, 14 180:6, 15, 16 215:9, 10 problems 35:15 152:10 154:7 Procedure 47:17 procedures 52:13 153:8 process 51:16 54:16 56:21 115:13 118:19 166:16 168:22 169:2 173:13 195:21 processes 171:22 produce 16:12 17:23 42:10, 14 43:12
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

produced 14:2 18:9, 17 19:2 25:23 32:2 34:4 60:11 90:17 209:1	promotion 67:18, 19 promotional 66:9, 11 82:10 86:14	Publicly 128:13 138:7 publish 111:18 121:20 220:16 published 8:21 9:8 56:19 108:17 112:19, 20 114:14 117:14 121:16 134:2 201:8 210:17 publishing 96:5 220:16 PubMed 14:12 15:11, 22 27:5, 23 28:4 119:9 124:14 pull 16:22 103:1 128:15 156:24 202:15 208:6 pulled 14:9, 11, 23 31:4 74:17, 21 84:21 90:8 95:12 96:6 124:11, 13 128:17 170:3 195:24 pulling 180:2 Punta 3:5 pure 150:21 purely 179:9 purpose 81:16 82:1 pushing 160:16 put 25:5 42:12 53:9 69:13 116:1, 16 139:5 161:11 162:13 184:14 193:14, 16 196:6 203:21, 23	putting 83:17 113:19 157:14 193:4 puzzle 116:17 < Q > qualified 159:9 qualify 36:24 172:21 173:14 qualifying 37:7 question 16:7, 17 17:14 19:18, 19, 22, 23 20:22, 24 21:3, 6, 9, 11 23:12, 19 27:12, 21 28:21 30:1 31:22 33:1 34:5 37:1, 2, 18 39:16, 24 40:2, 9, 13 42:16 54:4 55:2 56:9 57:8, 9, 13, 22 65:15 72:19 83:14, 24 88:21 98:14 102:11 106:16 107:8, 21 109:13 116:22 126:16 127:17, 22 128:7 130:8 131:16 139:11, 19 140:8 141:14, 22 142:4, 19, 20 148:15 150:14 151:12, 16 163:23 164:23 167:16, 17 168:6 171:20 181:2 186:6 191:19 195:11 198:6	200:1 202:16 203:24 204:14 209:15 214:10 216:8, 14, 17 217:10 questioning 203:21 questions 28:17, 18 29:1 58:16 100:10 117:23 144:19 146:11 157:7 176:8 196:10, 19 197:17 203:5 209:4 213:9 216:20 217:5 quick 58:15 124:22 125:12 183:9 quite 56:1 91:8 128:19 139:11 quote 87:24 < R > racial 98:5 raise 216:20 ran 27:13 124:14 randomized 111:10 112:2 120:19 122:20 range 65:6 114:8, 21 153:17 ranges 215:1 rare 66:15 RASPANTI 5:16 rate 51:1 rationale 52:6 152:5 rattle 76:22 raw 173:11 RBK/JS 1:5 reach 184:5
-------------------------------------------------------------------------------------	--------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

reaching 189:4 195:10	143:17 144:8 148:8, 22, 23, 24 149:12 150:2, 9 153:2 160:5, 21 167:5 176:14 178:1, 4, 22 179:1, 21 185:9 186:14 189:14 190:5 195:22 197:7 205:2 211:2 214:7 215:22 219:9, 20 222:15	179:20, 22, 23 180:13, 14 188:21 189:7 195:11 196:18 197:17 205:10, 14 206:5 recalled 177:22 179:13 181:8 183:3, 4 receive 35:1 70:5 81:6, 11, 14 87:20, 22 177:2 204:18 received 26:24 31:11 32:8 39:16 41:11, 14, 16, 19 42:18 43:15, 17 65:1, 5, 12 74:19 79:8 105:18 128:6, 21 129:2 181:7 196:3 201:14 204:2, 3, 16 205:4 receiving 201:5 receptionists 197:4 recess 58:23 131:1 183:16 recognize 22:14 49:12, 15 60:7, 9 77:3 91:1, 10 93:8 98:15 101:21 102:5, 9 117:8 recognized 52:14 recollection 83:15 100:19 recommend 153:8 recommendatio ns 161:17 214:2	record 10:1, 10 12:11, 12 13:2 58:18, 20, 22 59:2 68:23 95:1, 9 130:22, 24 131:4, 6 183:13, 15, 19 196:6 201:7 202:21, 22 205:16 207:16 219:20 223:5 records 19:11, 20, 24 20:1 56:5 recross 222:23 recruit 69:7 70:1 recruiting 72:10 recruitment 72:12 red 152:8, 9, 17, 20, 23 153:3, 9, 18, 19 154:12, 19, 22 redacted 96:13 98:20 redirect 212:23 REEFER 5:18 refer 50:1 reference 53:3 54:21, 23 55:6 56:4, 6, 13, 14 101:2 117:9 119:8 158:19 159:3, 10 referenced 31:4 44:9 56:15 98:3 187:3, 4 190:11 references 44:10, 14, 15 54:16, 18, 23 55:10, 11	157:19 158:20 159:1 referred 198:7, 8 referring 15:13 153:24 198:22 refill 190:2 reflecting 25:19 208:19 refractory 112:21 refusal 17:18 refused 16:20 refusing 16:12 regard 34:20 41:21 42:19 129:16 191:14 196:23 198:6 regarding 41:23 43:17, 23 78:21 134:15 147:6 regardless 29:14 regards 43:3, 12 89:15 217:24 Regents 210:7 regimen 151:22 179:12 Registered 1:17 224:3 regular 155:10 regulate 133:17 regulatory 133:21 188:15 rejected 161:18 relate 40:5, 19 78:18 206:17 related 40:2, 12 41:4, 9 64:8, 14 65:23 68:16, 17 79:23 85:16 122:9 125:7 130:3 138:21 151:7
---------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

160:4 167:6 206:18 RELATES 1:6 relating 160:2 relation 198:14 relationship 151:5 184:17 208:15 213:18 relative 80:7 154:16 159:16 162:5 224:16, 18 relatively 124:22 159:15 Release 8:4 43:7 relevance 28:17, 22 29:14 100:15 relevant 28:13, 14 29:10 34:13 122:4 125:22 127:1 128:8 145:2 148:8 176:5 208:2, 5 reliable 52:17 reliance 9:8 193:4, 9 relied 36:6, 12, 15, 17 37:3, 13 58:2 130:1 195:9, 14 rely 127:2 relying 47:7, 13 174:3 remember 14:21 20:12, 14 21:19, 20 24:20 28:1, 6, 7, 8, 13 47:5 81:5 99:17 120:15 138:1, 2 212:18 Remote 1:14 203:8 REMOTELY 2:1 3:1 4:1 5:1 73:18	100:14 153:20 224:7 remove 112:3 removed 113:5 remuneration 206:16 renaming 202:21 render 171:22 191:8 renin 74:24 rental 197:2 repeat 21:1, 2, 3 24:3 37:19 126:5 142:15, 18 repeated 21:10 repeatedly 107:16 114:14 127:2 190:22 rephrase 45:15 55:4 188:1 Report 7:19 16:6 36:7, 8, 13, 18, 22 37:4, 9, 14, 21 38:13, 14 39:12, 21 40:5, 6, 20, 21 44:11, 16 45:7 47:11, 15, 18, 21, 24 48:3, 7, 8, 11, 18, 22 49:1, 3, 9, 13, 15, 18, 22, 24 50:15, 21, 22 51:4, 11, 15, 17 52:9, 22 53:1, 7, 12, 17, 20 54:11, 13 55:8, 9, 12, 15, 22 56:3, 7 60:20 70:22 71:4, 6 72:3 106:16, 19 111:23 122:20 123:23 129:8 131:15, 23	132:16 133:5 136:8 139:4 144:24 145:10, 14, 22 146:7, 15 147:7 148:13, 16 149:17 151:17, 19 156:20 157:2 162:14 163:11 167:8 172:2 183:22 184:2, 4, 6, 13, 16, 18, 23 186:7, 17, 23 187:2, 18 188:4, 10 197:15 204:24 212:4 213:9 reported 19:15 158:1 Reporter 1:17, 18, 19 10:11 12:16 192:6, 18 193:12, 15, 21 194:3, 22 195:2 220:13 224:4, 5, 24 REPORTER'S 224:1 reporting 112:3 118:2 174:17 Reports 9:3 14:9, 23 15:2 27:8, 23 46:24 47:1, 4, 14 124:12 127:10, 11 129:6 170:20 represent 90:15 203:18 representation 70:3 reputable 166:13 reputation 69:3 84:9 87:18 93:2, 3	request 17:4 18:11, 20 25:18 35:1 37:16 39:4 41:20 42:23 60:24 222:18, 22 requested 33:23 34:3, 6 requests 16:9 18:3 30:11, 16, 21 38:20 require 211:9 required 159:15 requires 47:23 Research 8:19 41:2, 8, 11, 13, 16, 19, 21, 22 50:9 64:16, 21 65:8, 14, 23 68:17 69:7 70:2 72:2 73:14 76:23 77:14, 17 78:10 105:19 114:18 168:4, 13 170:16 196:19 researcher 41:18 resent 98:8 reservation 196:16 reserve 194:17 202:5 216:20 218:4 residency 61:15 64:10 195:17 resident 61:16 residual 159:18 resistant 112:22 119:20 resolution 9:11 201:9 resp 28:16 respect 42:2 175:12	respectfully 28:16 responding 39:4 response 17:4, 11, 18 94:10, 16 104:9 129:19 130:12 153:12, 14 181:17 Responses 7:14 12:24 13:6 responsible 89:7 responsive 14:2, 7 17:19 18:2, 10 30:11, 16, 20 32:4 33:18 35:1, 5 42:22 222:9, 20 rest 105:11 122:13 162:20 result 123:4 153:23 176:21 179:10 181:8 186:18 results 27:5 122:12, 18, 24 123:13 131:17 133:13, 20 134:1, 2 retained 20:10, 13 44:18, 20, 24 45:3 46:16, 18 review 9:4 13:22 18:21 46:23 50:9 54:6, 15 58:7 71:1 107:4 115:16 119:15 127:5, 6 133:13, 20 136:19 137:10 145:1 150:14 171:7
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

183:10 189:1 195:21 reviewed 15:4 38:12 47:1, 4, 6 52:12 57:3, 24 58:8 106:13, 19 124:12 125:21, 22, 23 136:7 137:19 150:12 171:14 174:14, 22 188:18, 20 189:6 204:10 209:12 210:14, 18, 24 211:12, 17 216:19 reviewer 161:21 reviewing 14:10 56:11 160:15 161:12, 15 revised 48:22, 24 right 16:7 57:18 59:8 63:18 67:11 68:14 80:21 86:17 91:1, 8 116:11 130:15, 20 142:21 143:5 147:14 150:6 157:21 162:20 174:16 181:10, 12 193:13 197:23 202:24 203:6 209:3 216:5 220:10 rights 194:18 202:6 216:20 218:4 RISE 69:24 risk 9:4 86:14 107:16,	18 108:2, 11, 16 110:5 112:21 137:22 140:21 147:2 148:23 149:1, 2, 8 150:4 151:11 158:12 162:19 163:3, 7 164:5, 7, 8, 14, 22, 24 165:1, 13, 14 180:9, 20, 22 184:15 185:12, 15, 19 198:14, 20 200:11, 17 213:18 214:8 215:18 risks 34:20 159:16 162:5 RITE 4:3 Road 4:11 ROBERT 1:7 Roger 8:10 93:6 role 185:23 room 194:2 211:8 ROONEY 3:11, 18 root 170:19 171:8 ROSA 6:2 10:2 Roseland 2:20 roughly 23:10 163:15 rounds 161:19 route 143:21 routine 155:8 199:9 RUBEN 3:10 ruben@honikla w.com 3:11 Rule 35:6 47:16, 22 51:7 177:9, 11 179:14 181:5, 18, 23	182:10 190:17, 23 Ruler 2:4 rules 21:4 209:20 210:15, 24 211:13 ruling 177:14 run 18:22, 23 73:6 215:9, 10 running 86:14 90:20 120:14, 23 121:7 222:16 < S > SA 4:9 safeguard 175:10 safeguarding 174:9 safety 8:15 103:23 129:6 salary 79:21, 22, 23 80:2, 7 197:9, 10 salesman 83:1 salt 108:9 sample 113:5 sampling 113:2 Sandoz 76:6, 8, 9, 11 SANGER 2:4 Sankyo 105:22 Sanofi 77:19 sat 69:8 70:7 161:18 save 225:12 saw 89:9 98:1 126:1 153:9 162:6 178:20 saying 32:21 71:6 100:19, 23 105:8 122:1 149:13 161:5, 21 162:17 166:21 169:9 174:7 179:8	181:11, 16 185:24 194:19 206:21, 23 says 39:6 49:24 71:22 90:16 105:18, 24 106:3 129:24 135:13 159:13 164:12 176:19 177:23 179:20 213:17 scan 153:14, 23 scanned 127:13 scans 215:12 schedule 214:22 scheduled 92:14 School 61:10, 13 62:14 195:20 197:5 SCIEGEN 5:20 science 52:13 75:4 111:3, 14 118:5 Scientific 9:3 52:14 81:13 132:2 146:21 147:13 205:6 scientists 175:16 scope 35:6 47:17 51:11 166:7 168:17 170:22 171:18 173:4, 17 174:24 176:2 screen 13:5, 7, 13 20:4, 6 21:8 23:21 25:13 26:21 28:12 84:11	101:20 103:18 201:20 screening 215:9, 11 script 103:9 scrolling 16:9 scrutiny 54:1 se 148:20 149:9 153:19 seamless 178:14 seamlessly 182:16 search 15:18 18:2 27:6, 13, 16, 19 28:3 30:20 32:3, 14, 18, 22 33:6, 14, 16 119:8, 16 120:20, 24 121:7 124:14 searched 15:10, 12, 19 16:5 27:4 31:20 34:7 222:19, 22 searches 14:7 15:20 27:9 30:10 120:14 searching 14:11 30:16 33:9 second 16:6 18:24 24:17 50:2 92:7 96:4 131:24 197:18 211:24 secondly 92:11 94:3 168:20 172:14 secretaries 197:4 section 72:2 101:22 105:14 129:23 131:23 145:15, 16, 17 146:16 147:7 148:12, 16
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

162:14 172:1 176:18 183:22 184:1, 4, 13, 15, 18 186:8, 23 187:2 197:16 206:10 213:8 Sections 184:5, 6, 19, 24 186:4, 9 sediment 152:8 see 13:19, 21 16:10 17:1, 2, 8 22:12 24:24 34:22, 23 36:9, 10, 24 39:1, 2 41:5 50:3, 4, 5, 12, 13 52:19, 20 56:6 60:15 70:24 71:3, 19, 20, 23 73:24 74:4, 6, 9 76:2, 3, 13 84:17, 19, 20, 24 85:3, 7, 20, 21 88:7 90:12, 13 91:5, 14, 21, 24 92:2, 5, 6, 12, 13 93:6, 16, 19 96:9, 10, 11, 14 97:7 98:12 102:8, 17, 19 103:20 105:13, 15, 23 106:10 117:15 118:12, 13, 18 119:23 130:4 132:6 143:7, 18 146:18, 19 147:3, 4 149:1, 2, 3, 14, 15 154:12 158:5, 6 172:7 174:18 176:23 178:6,	21 179:1 180:5 188:15 192:17 202:11 203:11, 15 208:16 220:23 221:2 seeing 139:8 153:19 161:6 163:19 seen 13:24 132:19 193:6 196:10 208:24 sees 174:20 select 207:24 selected 115:10 self-evident 51:21 seminars 34:19 35:18 send 195:6 sending 33:9 201:3 sense 43:6 124:24 154:16 sent 14:8, 16, 20 18:20 27:21 33:24 43:3, 15 124:11 125:8, 9 127:6, 7 129:10, 11, 12 187:3 202:12, 13 216:22 217:13, 17 219:24 sentence 150:2 158:23 159:12 160:5 176:18 177:17 197:18 198:7 Sentry 5:11 separate 108:17 September 1:12, 16 9:13 10:3 24:22 220:20, 21 221:10 223:8	sequencing 186:15 Seretis 9:5 156:19 157:3 Serhan 201:11 seriously 99:5 serve 69:16 served 12:20 13:23 16:8 36:7 38:13 40:22 48:21, 24 59:7, 13 69:15 85:17 88:13 222:10 Service 7:17 9:11 22:15 24:18 SERVICES 1:21 6:5 10:3 50:5, 20 79:4 221:3, 4 serving 81:17 set 21:22 36:7 58:16 118:2 120:22 121:1 167:24 168:4, 6 169:8 170:1 194:10 224:13, 21 setting 51:6 80:1 121:21 168:12 169:3, 5, 6 settings 111:17 112:3 Settlement 8:6 85:8 shaking 12:15 Sham 8:7 85:5 shameful 211:22 shams 86:7 share 13:5, 7, 12 84:11 101:20 201:20 203:5, 7, 10	shared 13:20 107:18 108:2, 11, 16 148:23 sharing 25:13 SHEET 225:1, 14 226:1 227:1 sheets 217:24 shield 121:22 shields 121:23 Shiff 219:7 shoes 161:12 203:21, 22, 23 shooter 82:8 short 82:2 Shorthand 1:18 224:4 short-term 180:20, 22 show 89:20 120:20 198:14 showed 122:14 showing 131:17 shown 27:7, 8 166:12 205:10 206:5 208:18 209:13 sic 85:13 131:4, 16 180:20 196:18 202:18, 20, 21 206:5 209:11 220:8, 18 side 125:24 126:2 160:20 161:7, 8 sides 46:24 156:12 218:11 sign 53:19 signature 60:16 SIGNATURE: DA TE 226:23 227:23 signed 48:16 49:13, 15 51:4	significant 123:4 signify 72:5, 8 signing 53:18 54:5 similar 11:18 158:16 163:24 214:7 simple 10:23 37:1 102:11 139:5, 11 141:16 Simply 31:15 57:24 58:8 84:6 122:24 138:24 140:7 145:5 206:23 208:4 SIMPSON 2:16 simulation 134:11 simultaneously 15:21 sin 121:4 Singapore 76:23 single 58:1 104:15 118:2 123:15, 19 183:2 202:16 Sir 21:2 sit 127:7 174:18 211:7 site 15:11 sites 44:10 123:7, 8 128:20 site-specific 116:8 Sitting 129:1 175:13 206:21 situation 75:12 SIU 63:19 six 27:3 58:19 62:19 149:14 177:2 sizeable 207:3 skipped 202:20 SLACK 2:4
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

SLATER 2:17, 21 slightly 41:20 55:19 sliver 197:8 slow 111:11 small 159:16 197:8 smart 134:9 175:6 smear 92:24 Smithkline 77:16 so-called 88:2 Society 64:3 134:20 SOLCO 5:4 solely 24:15 105:11 solid 215:21 Solvay 105:21 Somebody 54:24 133:6 167:23 176:9 222:4 soon 18:20 183:7 Sorry 11:23 21:4 52:2 71:8 90:6 94:19 96:4 105:4 126:5 131:5, 8 158:22 190:20 191:19 199:15 202:24 sort 27:3 118:4 149:11 sound 211:16 sounds 31:6 34:2 79:6 144:12 179:8 source 126:8 129:3 195:13, 22 sources 31:20 57:20 65:6 116:10, 13 124:16	128:22 171:1 South 4:5 Southern 8:3 63:20 90:9 space 197:2 spans 114:12 speak 38:3 45:24 82:11 97:21 130:6 187:11 217:20 Speaker 8:7 65:17, 20 80:8, 16 81:2, 5, 17 82:17 83:10 85:5, 15, 22 86:6, 13, 16 87:5, 11 88:2, 12 89:6 97:14 98:24 99:10 100:1 105:20 205:12 speakers 8:11 65:20 66:1, 2, 3, 8, 19 67:24 68:5, 9 70:14 80:18, 24 81:3 82:1 86:15 87:5, 10, 12 91:20 92:4, 21 speaking 39:23 66:16 79:3, 18 80:4, 6, 20, 22, 23 81:7 87:15 88:3 93:15, 22 94:4, 11 95:16 200:10, 12 speaks 51:17 217:2 special 72:15 specialist 64:1, 5 181:4 specialized 179:12 specific 11:20 16:7 35:19 43:6, 8 60:24 107:22 138:1,	3 152:11 153:4 158:19 195:23 198:8 205:1 218:3 Specifically 14:19 28:8 60:19 89:14 94:10 107:14, 24 108:15, 17 109:6, 17, 24 110:4 117:18 149:18 160:2, 4, 10 178:21 210:14, 18 specious 165:19 speculation 66:20 151:9 159:4 211:11, 15 spend 190:14 spending 19:21 182:8 spent 19:12 21:20, 21 62:7, 23 69:9 88:1 sphere 170:12 spirit 211:21 spoken 46:15, 17 93:1 sponsor 66:14 67:18 sponsored 71:18 102:7 spring 60:13 Springfield 11:3, 5 63:18 Squibb 105:21 stage 8:17 stand 92:23 93:2 178:24 standard 151:21 standing 69:10, 19, 20 81:4 175:5 STANOCH 2:11 start 10:23 12:23 14:6	16:11 18:4 40:15 42:5 49:17 52:8 61:7 68:20 69:1 70:23 71:10 90:19 112:13 118:19 125:4 126:3 139:8 163:19 209:8 215:4, 22 217:4 started 22:18 49:19, 21 50:15 61:24 62:4, 5, 6 68:4, 6, 8, 18 115:6 156:3 starting 22:19 50:22 131:24 starts 70:23 73:23 106:8 146:17 State 5:21 35:4 52:10 62:24 63:1, 5, 6, 15, 16 108:19 185:3 196:2 200:1, 4 210:19 stated 49:19 107:9 127:1 128:9 138:14 142:10 statement 47:24 48:7, 15 82:22 99:23 103:20 104:17 106:1 140:7, 18 141:20 142:22, 24 158:7, 18 159:4, 8, 9, 21 167:16 174:23 177:15 178:24 179:6 185:13 213:16	statements 140:13, 20, 21 141:3 STATES 1:1 83:22 86:6 88:24 90:10 115:9 statistical 118:10 123:3 status 184:21 steeped 160:22 steer 206:13 stellar 93:4 stenographic 10:9 stenographicall y 224:12 STEPHEN 4:17 18:19 73:2 steps 111:9 stepwise 43:14 stereotype 97:19 Steve 13:6 18:19 192:7 194:6 196:1 199:13 207:6 217:3 STEVEN 4:13 stick 167:15 stickies 20:5 21:7 23:21, 24 24:4, 14 28:12 sticky 20:3 221:16, 17, 18, 21 Stojeba 8:10 93:7 stones 153:16 stop 25:13 40:12 48:9 67:23 178:19 190:3 198:9 204:7 stopped 80:20, 22 95:16 stories 87:1 straight 82:7
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

straightforward 30:24 37:10	study 8:18 41:3, 12, 14, 17, 19 71:17 73:24 74:15 75:6, 18, 19, 24 76:5, 7, 13, 17 78:7, 12, 21 102:7, 17, 24 103:4 104:10 110:21 112:14, 16 113:8 115:5 116:18, 22 122:1, 2, 10, 11, 15, 23 123:1, 19 147:24 185:6	substances 163:24 167:19	suppose 116:10 222:23	switch 216:15
straws 94:6		substantial 180:23	supposed 55:13	switched 62:22
Street 2:9 3:4, 9, 14, 18 4:5, 16, 21 5:5, 21 11:3		substantive 53:12	sure 14:14 16:22 18:22 19:1 21:24 25:7 28:5 29:5 31:23 33:5 45:14 54:4, 6 55:3, 5 56:23 60:15 72:19 83:14 89:23 90:23 93:11 103:2 109:2 115:24 121:11 125:12 126:24 130:19 133:5 135:12 144:18 147:23 153:21 155:23 157:2, 8 173:2 174:22 177:6 183:13 184:12 194:21 196:3 203:9 220:14	sworn 10:14, 18 224:7 225:20
strengths 160:18, 24 161:2 162:9		substitute 178:13		symptom 155:8
strenuously 97:24		sufficient 57:23		sync 35:14
strike 140:4, 12, 17 170:17 187:19 211:24		sufficiently 52:17		synthesis 184:2, 4, 18 185:17
strikes 130:9		suggest 195:2		synthesizes 184:24
stronger 150:17		suggesting 181:2, 5 218:7		synthesizing 114:23
strongest 115:1 149:20 150:15		suggests 171:15		system 115:9 155:7, 10, 11, 12, 14, 15 156:10, 12, 15 158:11, 15 205:2
structure 145:15 186:7		Suite 2:4, 14 3:9, 14, 18 4:11, 16 5:5		systematic 9:4
structured 79:22		suited 114:3		systems 115:4
studied 108:9 161:4 185:8		summarizing 190:6		< T >
studies 9:5 74:23 78:19 101:6 110:23, 24 114:24 115:3, 12 116:11, 14 118:22 119:10 120:14, 17, 18, 20, 21 121:3, 15, 24 122:4, 14, 17, 19 123:6, 12, 14, 16 127:1 141:9 143:6 145:16, 17 146:21, 22 148:7 159:16 160:7 163:13 167:10 185:14 200:12, 20, 24 208:17	stuff 124:24 125:9 138:2 175:13 178:18 216:2 217:13, 17, 23	summer 22:20 60:13, 14		tables 38:21 39:10 40:4, 19 105:10
	stun 76:13	super 163:16 217:1		tabulate 21:13, 19
	subclinical 114:19	Supplemental 9:5 192:2 193:4 194:7, 13, 14 196:3 202:19 216:18 217:9, 12 219:24 220:19		tabulated 222:13
	subcontracting 75:21	supplied 58:6, 9 190:13		tabulating 221:14
	subgroup 110:24	suppliers 173:11		tabulation 222:16
	SUBJECT 1:9 8:11 92:3 145:9 199:10 205:7 206:18 210:3, 21	supply 173:5 174:9		tailored 60:24
	submitted 18:12, 14 19:5 24:20 71:1 75:10	support 105:19 122:13 145:5 164:19 197:2, 9, 11		take 12:16 27:10 37:23 38:7 43:13 50:14, 17 58:14, 15 71:17 73:21 100:15 111:9 113:6 116:24 118:11 122:10 130:17 138:11 154:13 155:10
	subpoena 12:21 87:20, 22	supported 102:18, 21 104:10, 18 105:11		
	SUBSCRIBED 225:20			
	subscribing 86:22			
	subsequently 61:11			
	substance 186:3			

158:21 159:2 162:13 179:24 180:4, 19 182:9 183:9 190:2 203:4 taken 67:5 133:3 161:22 169:18 175:23 224:11 225:10 takes 68:24 180:11 talented 134:9 169:20 175:7 talk 18:1 66:10 82:9 99:5 101:3 140:23 144:8 151:17 180:4 206:1 talked 45:8, 12 107:16 137:15 talking 16:4, 19 21:20 26:2 47:23 52:24 66:11 72:20 112:17 134:22 156:24 177:24 178:1 179:21 180:7 218:16 219:10 task 114:20 116:15 teaching 80:1 team 44:5 techniques 113:2, 17 teed 190:5 Tekturna 74:1 75:18 telephone 50:11 tell 19:1 38:2 71:11 82:15 83:9 92:22 98:6 99:22 107:4 108:22, 24 129:2	130:12 141:9 142:3 153:4, 19 163:2 172:15 176:13 181:17 192:19 194:11 195:6 201:12 210:8 216:23 telling 37:7 151:20 tells 153:4 163:3 168:21 180:1 tend 113:13 155:19 tens 85:15 termed 81:2 terminology 136:4 172:14 173:6 Terminus 4:11 terms 15:20 115:14 119:23 120:2, 20 214:23 test 131:17 133:13, 20 134:1, 2, 16 tested 170:12 189:2, 7 testified 10:18 57:4, 15 59:6 189:6 211:12 221:15, 18 testify 221:17 224:7 testifying 11:17, 19 testimony 11:7 19:7 24:6, 12, 13 27:22 31:19 33:16 38:23 45:7 47:11 67:13 68:12 95:15, 17 100:4 125:23 126:4 127:3 128:21	133:12 143:22 190:15 213:13 224:11 testing 134:19 188:22 189:16 190:7, 12 191:4 208:8 215:5, 13, 21 tests 155:8 214:22 215:7, 24 TEVA 4:7, 9 44:18, 24 45:3, 17, 23, 24 46:5, 10 125:21 126:11, 19 127:15, 18, 24 187:18 188:5, 9 212:5, 12 Texas 2:5 textbook 44:14 textbooks 44:9, 10 Thank 11:6 30:8 38:19 40:24 41:15 42:15 58:11 60:5 103:14 104:24 105:12 106:24 110:8, 15 130:14, 20 131:8 139:10 147:21 157:16 187:8, 9 192:21 203:3 207:18 209:3 211:23 222:24 223:1, 3 Thanks 191:22 223:2 theoretical 164:17 theoretically 189:15 Therapeutic 8:19	Therapeutics 9:10 201:8 209:10 210:17 therapies 178:4, 16 180:16 therapy 8:16 103:5, 21 104:16 118:23 119:22 182:17 216:12 thereto 38:14 41:4 thing 21:7 33:11 93:12 105:1 112:16 127:9 203:8 207:8 things 15:9 26:14, 20 28:13 30:23 43:6 46:9 57:2, 3 61:5 65:18, 22 66:14 78:23 80:6 83:4 108:10 109:20 111:6 126:1 137:16 140:20 144:6 148:20 150:19 152:15 153:17 162:5 165:22 170:11 182:8 199:5 215:15, 20 think 15:8 20:21 21:18 33:20 54:24 57:3 58:12 66:22 75:19 79:14 82:20 97:17 122:5 124:21 128:20 130:12 132:11 134:12 141:9	147:10 150:17 160:13 161:8 163:5, 10, 11 164:4, 7, 21, 24 165:11 171:20 182:14 189:5, 10 194:15 204:9 207:13 213:3 218:12 220:9 223:2 thinking 168:4 Third 157:24 189:23 Thirteen 202:23 THORNBURG 4:3 thorough 54:6 145:1 thought 28:8 54:23 55:6 thousand 113:4 thousands 79:14 85:15 177:13 185:19 191:1 Three 4:20 23:9 33:20 62:23 69:9 92:20 152:10 161:19 209:24 211:4 three-page 96:12 threshold 168:11 threw 222:3 tilted 175:8 time 10:4 19:10, 12, 15, 19, 20, 21 21:19, 20 28:20 29:3 48:8 53:19, 20 55:9 58:21 59:1 60:10 62:22
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

63:10 66:6 67:6 69:2 70:8, 16 71:14, 15 76:18 80:17 81:10, 12, 14 82:2 83:2, 3, 18 85:23 87:16 95:16 96:16 115:6 116:5 130:23 131:3 141:18 172:20 182:8 183:14 190:14 200:15 211:24 212:2, 13 223:4 224:12 timeframe 60:17 86:17 87:13 100:17 219:10 times 11:10 29:2 33:20 53:21 70:17 72:13 122:24 123:2 128:9 135:19 149:7 156:20 160:16 163:18 172:6 182:15 216:15 title 117:12 titled 8:5, 15, 20 9:3 74:1 85:6 148:13 today 10:8, 22 11:18 45:7 47:11 63:17 129:1 169:17 208:18 209:1, 13 211:24 212:2, 14, 17 220:1 221:10 Today's 10:3 told 23:20 27:2 173:20 216:17 222:13 tolerance	169:4, 5, 9 tools 78:17 top 83:6 87:12 128:19 133:18 134:10 148:22 167:1 197:10 topic 35:23 topics 175:23 top-shelf 88:4, 13 total 62:19 79:8 197:12 totally 202:8 touch 183:22 touched 43:22 touching 207:8 tough 150:19 toxicology 64:13, 15 trace 132:3, 9, 22 134:24 135:4, 16, 17, 22 136:3, 24 137:7 145:6 146:24 track 19:10 68:23 tracked 15:6 tract 153:18 Trade 3:18 trail 154:11 training 64:11 78:16 181:20 195:17, 19 transcript 12:12 224:11 225:10 Transcripts 125:16, 21 126:6 127:23 transition 178:7, 13 179:2 182:16 transitioned 182:6 183:7 transitioning 180:15 translate 130:7	transparency 206:14 207:1 210:20 211:21 TRAURIG 4:9, 13 45:18 46:10 treat 216:6 treated 158:2 treating 79:19, 23, 24 151:13, 14, 22 213:21 treatment 8:20 113:11 117:13 119:5, 10 179:12 treatments 113:13, 23 tree 84:7 132:15 215:3 tremendous 175:12 trial 38:23 111:10 112:2 117:24 118:2 trialist 110:22 trials 8:22 70:3 110:24 117:14, 22 118:1 119:5, 17 120:19 122:20 tried 126:24 trouble 67:11 Troy 97:1, 3 true 105:10 135:6 159:11 160:6 167:3 190:1 198:15 216:21 225:12 trust 134:4, 6, 14, 17, 19 141:3 143:8 175:17 trusted 141:2 truth 224:8, 9 try 27:20 75:5 78:24 111:9 114:4 116:3 117:23 153:11 172:10	trying 38:2 56:24 58:11 92:21 95:10 99:7, 17, 18, 21 112:3 114:22 115:13 118:19 139:2, 20, 23 144:10 145:14 177:16 179:5, 23 181:9 184:3 185:4 206:13 211:2, 22 Tuesday 223:7 tumor 154:14 tumors 141:11 143:16 154:1, 2 turn 131:22 145:9 148:12 149:17 turned 199:13 Turning 106:5 144:23 twice 23:19 53:18, 21 54:3 twisting 213:4 two 15:9 18:12, 14 19:5 25:24 29:6, 7, 16 30:1 32:2, 11 62:7 66:9, 23 69:24 82:24 91:19 92:18 96:12 107:20 111:14 114:15 152:7 161:19 165:2, 8 178:11 183:14 184:19, 24 189:19 two-day 99:24 type 14:6 123:10 200:19 types 110:23 132:4	typically 26:12 66:11 68:17, 22 69:18 70:18 81:11 113:8 120:15, 22 151:21 194:24 197:8 < U > U.S 5:3 8:3, 5 84:21 uh 100:20 Uh-huh 22:23 ultrasound 153:23 154:13 Um-hums 12:14 Un 122:8 unable 171:16 unacceptable 182:5 unambiguous 135:17 unanswerable 55:1 unavoidable 166:5 unbiased 113:19 uncertainty 146:12 unconfounded 143:18 185:14 uncontrolled 213:22 214:7, 11, 19 215:12 216:6, 9, 16 uncover 146:3 underhanded 104:18 understand 16:4 17:3, 17 18:6 19:22, 23 31:14, 22 34:8 39:3 55:21 56:24 57:5, 13 72:19 75:5, 6 78:18 112:11, 17 118:20
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

121:14 134:20 140:16, 22 162:11 163:22 184:3 187:17 194:1, 21 196:15, 16 202:8 understandable 67:7 understanding 33:1 35:7 39:5 42:8, 24 43:1 44:17 45:1, 2 47:12 58:12 66:17 76:7 83:20 94:17 124:21 145:14 155:4 176:6 188:2, 4, 9 204:14 218:14 225:15 Understood 23:6 71:16 75:16 122:8 151:6 212:19, 21 undertake 113:17 unethical 83:18 84:6 unexpected 172:5, 12, 14, 21 173:6, 14, 21 174:2, 10, 15, 17, 20, 21 unexplained 150:7 unexposed 185:8 unfunded 71:1 75:10 unique 75:12 160:8 UNITED 1:1 83:22 86:5 88:24 90:10 115:9 University 11:3 61:11,	13, 17 62:1, 7, 10, 20 68:7 76:19 unlawful 83:21 Unlawfully 8:8 unmedicated 149:3 162:24 unnecessarily 163:7 164:5, 8 165:14 unreasonable 93:13 146:8, 11 untreated 158:4 updated 48:22, 24 60:10 updating 61:4 upload 194:4 195:3 ureters 153:1 urethra 153:2, 14 urinalysis 151:15, 18 152:4, 5, 16 154:10 urinary 153:18 urine 152:8, 13, 21, 24 153:3, 9 154:13, 20, 22, 24 USA 5:9 use 15:21 61:3 99:2 104:4, 15 112:24 120:21 128:9 133:7 135:4, 16 136:23 139:20 145:2 172:5 174:3 usual 151:10, 17 usually 148:3 utilized 95:19	189:4 < V > vague 185:1 val 103:5 Valcar 179:20 VALSARTAN 1:4 10:6 14:12 15:10, 13, 17, 18, 19, 23 27:5, 13 103:5, 21 104:5 105:6 115:2 124:14 131:18 132:3, 14, 22 133:14 139:6 140:2 143:21 145:2, 7, 17 146:24 147:1 163:12, 15 164:13 167:11, 19 168:15 171:17 172:2 173:13 176:22 177:23 178:8 179:14, 20 180:13, 14 181:8 182:21 183:3, 4 184:17 185:8, 11 188:16 190:16 200:7, 14, 19, 21, 22 208:20 225:4 valuable 70:8 81:10 value 83:17 162:15 vantage 174:18, 19 variables 206:17 varied 65:7 variety 57:19 67:15 113:17 133:7 140:20 199:4 various 65:22 68:13 79:6	109:20 113:23 116:10 vary 210:1 vast 197:1 VAUGHN 2:17 VDATH 95:7 Velazquez 92:8, 9, 10 verbal 12:13 verbatim 221:3 224:11 versed 110:23 versus 90:10 113:15 129:3 216:6 VICINAGE 1:2 VIDEOGRAP HER 6:2 10:1, 2 58:21 59:1 130:23 131:3, 7, 10 183:14, 18 223:4 VIDEOTAPED 1:11, 14 7:15 view 28:21 29:14 VII 172:1 176:18 186:9 VIII 131:23 146:16 147:7 184:5, 15 186:5, 9 violates 211:21 violation 140:12 virtually 185:9 200:24 Vitae 7:19 Vitamin 74:1 < W > waiting 143:17 waiving 130:2 Wake 62:23 walk 61:6, 8 112:12, 14	118:19 WALSH 4:20 want 14:14 29:2 58:15 73:2 82:13 91:21 99:22 100:17, 20 108:19, 22, 24 117:23 121:14 124:23 125:10 130:21 135:10 140:16 142:15 178:22 191:24 192:2, 10 193:8, 21 194:23 203:23 207:3 wanted 99:24 183:21 warned 173:11 Washington 3:14 4:16 waste 29:2 wasteful 215:14, 15 wasting 28:20 182:7 water 165:20 168:8 169:24 170:6, 11, 12, 14 Way 2:4 15:6 27:10 40:5, 20 45:15 47:11, 14 55:19 56:19 67:7 79:21 89:12 100:14 109:3 117:1 118:1 120:16 123:16 133:8, 10 162:8 169:8 175:9 182:9 186:13 190:4 203:19
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

204:21 214:8 218:8 221:14 Wayne 62:24 63:1, 4, 6, 15, 16 ways 26:18 27:3 132:14 133:7 166:14, 17 weak 159:17 weakly 123:8 weaknesses 160:18 161:1 162:9, 10 website 84:20, 22 websites 84:4 wedded 26:18 Wednesday 8:4 weeks 23:9 24:21 69:24 weighing 180:20 weight 113:5 139:4 140:1 160:20 167:6 Well 14:8, 11 19:18 20:13 22:4, 24 27:18, 20 28:7, 16 29:13 30:22 38:7 39:5 40:1 42:5 43:13 45:14 49:19 53:12 54:4 55:3, 18 57:10 63:8 65:10, 15 68:21 72:8, 21 73:21 75:11 76:12 79:21 93:5 94:2, 22 95:21 98:8, 11, 19, 23 99:6 100:20 106:11, 15 107:6 108:5 109:2 110:22,	23 115:8, 11 116:24 119:9 121:11 122:1 126:3 129:10 130:8 132:18 133:24 134:22 139:1, 10, 18 140:23 141:1 142:2 144:9 147:18, 20 150:11 153:13 154:22, 23 155:4 159:5 161:11 164:4 166:9 167:14 168:19 169:8, 16 172:13 173:1, 7 174:21 177:14, 18, 21 185:22 186:3, 13 188:3 189:10, 17, 18 191:11 195:16 200:4, 20 203:17, 19 206:1 212:1, 17 217:3 218:2 219:5, 8, 11 went 19:10 24:7 61:10, 11 70:3, 13 75:20 92:19 130:17 147:6 178:1 191:11 we're 134:22 193:23 WERNER 5:9 West 3:18 we've 33:20 58:13 90:11 114:1, 16 166:11 whatsoever 78:14 170:16 WHEREOF 224:21 WHITELEY	2:6 Whoops 90:6 wife's 73:6 wiggle 211:8 wild 86:24 wildly 86:21 87:3 WILLIAMSO N 3:6 willing 83:10 91:22 WITNESS 7:3 10:12, 13, 17 11:14, 18, 19 12:21 14:9, 23 15:1, 2 16:18 17:7, 21 19:14 20:20 21:17 23:2, 18 24:2, 11 25:5 27:8 28:24 29:9, 18 30:4 31:10 32:7, 16, 24 33:8, 21 34:12 35:13 36:1, 20 37:6, 17 38:16 39:14 44:23 45:10, 21 46:7 47:14 48:1, 6 51:9, 19 53:14 54:9 56:10 57:10 58:5 59:7, 14, 19 64:20 65:4 66:21 67:14 73:5, 16 77:2, 7, 13, 21 78:2 79:11 81:9, 19 82:5, 19 83:13 84:1 86:2, 11 87:7 88:12, 16 89:19 93:18 94:1, 15, 19 97:10 99:15 101:9 104:7 108:4, 21	109:8 110:3 115:20 116:20 121:10 126:15, 23 128:5 133:2, 16 135:3 136:1, 10, 16 137:3, 14, 24 138:10, 18 139:17 140:15 141:8 142:1, 14 143:3 144:2 146:1 147:9 148:2 149:24 151:24 155:22 157:15 163:9 164:10 165:6, 17 166:8, 23 167:22 168:18 169:15 170:9, 23 171:19 172:24 173:18 174:6 175:2 176:3, 20 177:5, 16, 20 179:10, 18 181:15 182:3 183:6 184:8 185:2 186:12 187:8, 9 188:7 189:12 190:21 191:10, 20 198:12 199:16 204:9, 13 205:18, 20 208:23 209:23 212:16 213:2, 15 214:15 217:11, 13, 17, 22 219:4, 17 222:12 224:6, 7, 21 witnessed 88:17	witnesses 175:22 women 154:23 word 93:14 132:8, 9, 19 133:4 134:24 135:4, 16 136:24 138:11 158:21 159:2 172:5 174:4 wording 53:11 words 111:2 116:1 133:6 work 10:24 11:2 23:10 24:8 25:20 45:16 49:21 55:11 60:22 65:17 66:15 68:13, 19 72:11 77:22 78:3, 17 79:8 106:14 107:9, 10, 15 108:10, 18 110:6, 13, 21 112:18 113:16 114:1 144:20 177:9 181:5 197:5 218:24 219:8 220:20 221:1 worked 23:3 53:21 79:2 100:12 134:7 175:4, 14 working 22:18, 19 49:20 62:6 114:1 205:5 works 175:15 workup 151:18 154:18 world 112:20 144:13 162:20 169:23 211:7 worry 26:21 worth 24:8 worthy 219:2
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>wrap 183:21 223:2</p> <p>write 53:9, 10, 20 54:2, 10, 11, 12 56:22 130:10, 13 131:24 160:17 205:6 218:6</p> <p>writes 56:17 67:1 91:14 93:10</p> <p>writing 49:17 50:15, 21, 22 51:10 56:12 94:9 162:12 204:3 206:19 210:22</p> <p>written 19:11, 20, 24 20:1 23:14 25:19 26:10 43:9 46:12, 19 55:12 101:1, 4, 5, 10 110:4 125:13 187:2 204:5 211:4</p> <p>wrong 84:7 132:15 156:19 215:3</p> <p>wrote 21:12 23:13 48:8, 11 53:7 55:9 91:24 107:6 117:18 206:7 210:4 219:6</p> <p>< Y ></p> <p>Yeah 13:8 19:23 41:6 50:7 58:17 65:21 66:22 69:6 76:5, 21 77:8, 22 80:10 84:23 88:8 93:19 94:13 107:8 111:16 118:6 123:23 131:11 177:6</p>	<p>201:15 208:3 220:11</p> <p>year 50:23 67:23 68:4 79:17</p> <p>years 62:7, 12, 16, 19, 23 63:2 65:2 69:9, 10 73:14 80:10, 19 112:23 114:13 163:16 177:3 196:20</p> <p>yeoman's 144:20</p> <p>Yep 85:2 91:7 96:15 117:19 118:17 157:5</p> <p>yes-or-no 139:19 140:8 141:16, 19 142:4, 9, 20</p> <p>yesterday 26:1 217:14, 18</p> <p>York 8:4 90:9</p> <p>young 70:18</p> <p>< Z ></p> <p>Zajicek 1:17 224:3, 24</p> <p>zero 167:18 168:7, 8 169:4, 5, 9, 10, 24 178:12 180:14</p> <p>ZHEJIANG 5:3</p> <p>zoom 103:10</p>			
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--	--

Errata Sheet

September 28, 2021

Deposition Transcript – John M. Flack, MD, MPH, FAHA, MACP, FASH

In re: Valsartan, Losartan, and Irbesartan Products Liability Litigation

Pages, Lines	Change:	Reason
Page 11, Line 2	“work address is 7 Southern Illinois”	Transcription error
Page 33, Line 1	“My understanding of your question is that you did”	Clarification
Page 33, Line 2	“ you get all of the information”	Clarification
Page 53, Line 20	“By the time I write a report I have read it and”	Clarification
Page 53, Line 23	“that, but there as have been many”	Clarification
Page 54, Line 2	“just a that I write”	Transcription error
Page 61, Line 18	“where I did, again an , National Institutes”	Transcription error
Page 61, Line 19	“postdoctoral fellowship, in cardiovascular”	Clarification
Page 65, Line 5	“perspective, I had have received”	Transcription error
Page 66, Line 23	“the FDA cracked down the on them -- also,”	Clarification
Page 67, Line 1	“ and in who writes what prescriptions”	Transcription error
Page 67, Line 18	“and give promotion promotional talks”	Clarification
Page 74, Line 18	“get but about \$25,000 in that. So”	Clarification
Page 75, Line 5	“drug better. That's where what ”	Clarification
Page 75, Line 6	“our study was, is a study to”	Clarification
Page 86, Line 22	“there to employ promote subscribing”	Clarification
Page 104, Line 12	“ or in combination”	Transcription error
Page 105, Line 10	“not true. This is basically Go back ”	Clarification

Page 108, Line 7	"diabetes mellitus, which is common diabetes mellitus - which is common "	Clarification
Page 108, Line 8	"physical activity, certain intakes of physical activity - certain intakes with "	Clarification
Page 112, Line 23	"cycles of NHANES data, that's"	Clarification
Page 113, Line 5	"bias by the weight of the sample how they weight their sampling "	Clarification
Page 113, Line 6	"and so you"	Clarification
Page 127, Line 7	"dive to to too in depth"	Transcription error
Page 129, Line 11	" that's there's a difference"	Transcription error
Page 132, Line 12	"is fairly pretty good"	Transcription error
Page 144, Line 9	"Well, you can't say it is biologically plausible, therefore it causes cancer in humans , which"	Clarification
Page 152, Line 24	"It could be origin ate "	Clarification
Page 153, Line 1	"the waters uterus to"	Transcription error
Page 160, Line 17	"you basically ex-train "	Transcription error
Page 167, Line 12	"cancer is firstly virtually nonexistent."	Transcription error
Page 178, Line 12	"There is zero problem with finding a "	Clarification
Page 180, Line 9	"risk and caused cancer"	Transcription error
Page 185, Line 17	"plausible hypothesis -- a synthesis"	Clarification
Page 185, Line 18	"no confirmatory data in humans that are — expands into the despite studying "	Clarification
Page 185, Line 22	"well below what is"	Clarification
Page 189, Line 21	"the 40-milligram -- the 160- milligram pill has probably 10 micrograms"	Clarification
Page 190, Line 2	"medicine and because "	Clarification
Page 198, Line 4	" is a little more normal on"	Transcription error
Page 205, Line 21	" general journal editor."	Transcription error
Page 210, Line 10	"Christine Lang Laine would"	Transcription error

Page 210, Line 8	" the Journal of The Annals of"	Clarification
Page 210, Line 9	"Internal Medicine Journal does"	Clarification
Page 214, Line 9	" are for both cardiovascular"	Transcription error
Page 219, Line 7	"Ernesto Shiff Schiffrin , one"	Transcription error


John M. Flack, MD, MPH, FAHA, MACP, FASH

, Notary Public.

This, the 2nd day of November, 2021.

My Commission Expires:

